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ORIGINAL ARTICLES

REPORT OF A CASE OF ANEURISM OF THE SUBCLAVIAN; LIGATURE IN THE FIRST PORTION; RECOVERY.*

BY HERMAN E. PEARSE, M. D., KANSAS CITY, MO.

The cure of aneurism is a matter for operative procedure only; the so-called "medical" treatment by aconite, iodide of potassium, and other cardiac depressants, gives a record of scant success. The only generally successful method has been the ligation of the vessel with or without excision of the sac and in later years the intrasacular suture after the method of Matas of New Orleans. Where the aneurism can be isolated and all branching vessels easily secured and ligated and the entire sac reached and removed, the double ligation, proximal and distal, with excision of the sac, offers the greatest certainty of cure. The establishment of collateral circulation must be considered and the question of the life of the part supplied by the vessel must be weighed and risked.

The case presented here was one in which these chances and all others had to be taken, on account of the desperate nature of the growth and the certainty of disaster if it were left to take its course. The patient, Mr. G. a Swede, age 41, is a well built muscular man in robust health. He consulted me early in May, 1906. He is a locomotive engineer by occupation, running on the Frisco railroad. He was never ailing except that about November, 1905, he noticed a "big pulse," as he described it, on the right side of the neck at the level of the collar bone.

About February he began to suffer pain in the arm and to feel tingling sensations in the ring finger and little finger of the right hand. He was treated for rheumatism at first until the doctor found out about the "big pulse in the neck," when a diagnosis of aneurism of the subclavian artery was made. He went to his company surgeon, but received no encouragement of possible cure. He then went to the company surgeon at Thayer, Mo., Dr. Edward's, who called Dr. Harvey Maloney in consultation. Dr. Maloney advised him to come to St. Luke's Hospital and place himself under my care. The doctor

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wrote: "I have a patient here who has an aneurism of the right subclavian artery external to where the cerebral artery is given off. He is a Swede, about 41, single, good habits, physical condition good, except some trouble with right arm. Now from a medical standpoint there is nothing to offer this man. What can you do surgically? He is fairly well fixed and is anxious to have something done if there is any chance. He will come up to Kansas City any time to see you. Let me know just what you think about it." I reproduce the letter as an example of clear-cut definite English and frank, terse, statement of fact.

I found upon examination a pulsating tumor in neck on the right side. It lay behind and also on each side of sterno-cleido-mastoid muscle, but mostly external to it. It rose above the clavicle for about two inches. It gave only a faint bruit over its body, but over the base of the heart and the right subclavian region it gave a pronounced one. Radial pulse of right side pronounced; left side absent on account of old injury to the left arm. I advised him that the case was possible of operation, but one that carried about it a 90 per cent. death rate. I gave him the facts and figures as follows:

The American Text Book of Surgery, 1892, page 243, says: "If the aneurism is small and limited to the third portion, digital pressure upon the proximal side of the subclavian, although difficult for anatomical reasons, may be attempted in conjunction with constitutional treatment. Pressure directly upon the sac has been successful in a few cases. If compression fails, the artery should be ligated upon the distal side, since proximal ligation has proven ineffectual. It may be necessary, where other means have failed, to ligate the artery on the proximal side as a preparatory step, and then immediately to amputate the arm at the shoulder joint."

Deaver reports sixteen cases of ligation at the first portion, with thirteen deaths (1889).

Bryant reports twenty-one cases with nineteen deaths (1899).

Dennis quotes Ashurst in the *Int. Encyclo. Surg.*, vol. III, reporting fifteen cases with thirteen deaths (1902).

Twentieth Century Practice, page 589, quoting from Ballance and Edwards "Treatise on Ligation of Great Arteries with Observations on the Nature and Progress of Aneurism," (McMillan, London, 1891), reports fourteen cases all of which died—mortality of 100 per cent.

I am unable to present figures and statistics of a later date than the above, which shows 66 cases with 59 deaths—a death rate of 90 per cent. I submitted these facts and figures to my patient and he requested me at once to operate. Before doing so, I asked him to consult Dr. George M. Gray, the surgeon of St. Margaret's Hospital. This he did, Dr. Gray confirming the diagnosis. Desiring to secure for my patient the advantage of Dr. Gray's well known skill, I requested Dr. Gray to be with me at the time of operation, which he kindly consented to do. I set the day of operation for May 25, 1906, and directed

that the patient lie quietly in bed for the intervening two weeks. I also gave him a dose of 10 grains iodide of potash after meals three times a day. I believe the two weeks rest and iodide had not a little to do with the successful outcome of the case.

May 25th the patient was etherized by Dr. H. C. Andersson, and an incision was carried along the surface of the clavicle and upward along the posterior border of the sterno-cleido-mastoid muscle. We had confirmed Dr. Maloney's diagnosis of the growth, i. e., external to the vertebral artery, but upon opening we found that it also extended inward in a fusiform shape beyond the scalenus anticus muscle, thus calling for ligation of the artery in its first portion. By this time we had divided the platysma myoides muscle and the superficial and deep fascia down to the subclavian triangle. The sternal and clavicular heads of the sterno-cleido-mastoid were cut away and laid back. The external jugular vein was tied and cut and the tissues cleared away, down to the deep triangle, i. e., the first rib below, the brachial plexus externally, and the scalenus anticus muscle internally. The sterno-hyoid and the sterno-thyroid muscles were divided at their origin and laid back. The thyroid veins were pulled down and held out of the way with the subclavian veins, thus exposing the common carotid artery behind the posterior border of the sterno-mastoid. Here two difficulties presented; first, the growth had enlarged downward until the clavicle was in the way; and, second, the prevertebral fascia prevented us reaching the bifurcation of the innominate. After wasting much valuable time in attempting to reach a portion of the first part of the subclavian that would bear a ligature we abandoned the efforts and, packing the wound with sponges, we resected the clavicle, cutting it in the center and breaking the ends backward left and right.

Then we returned to the task of freeing the sac and, having failed in our efforts to reach the proximal end, we turned to the outer angle of the triangle, pulled up the brachial plexus, pushed down the subclavian vein, exposed the outer end of the aneurism, and when in healthy artery, we ligated at the distal side at two points, cut the artery between ligatures and lifted the sack upward. The scalenus muscle was cut and laid back. The superior intercostal artery was ligated and cut. The thyroid axis had fused into the sac and its separate branches had to be tied and divided. The internal mammary, and after it the vertebral, were tied and cut through. The pulse at the wrist had by this time entirely ceased and the hand seemed to be suffering for blood supply.

The growth (a large fusiform aneurism) was now turned over toward the neck and dissected loose from its attachment to the pleura and the upper mediastinum. The phrenic nerve and the carotid vessels were held away and we saw, to our intense relief, that the innominate was very short, almost absent, and a sufficient length of healthy

artery showed beyond the growth with strength to bear ligature. It was ligated at once, with strong silk and the aneurism sac cut away. The cut end of the artery was left long and was tightly sewed together by an intrasacular suture and the cut surfaces afterward "whipped over and over" with a celluloidine thread. The muscles were now replaced and sutured and the clavicle returned to its bed and wired; a drain was inserted, as about a dozen bleeding points had been ligated, and the wound closed.

Dr. Gray, Dr. Moennighoff and myself had worked hard for three hours and ten minutes. There was no accident, no hemorrhage and no shock, the arm was bandaged and wrapped in cotton, flexed and laid across the body and external warmth applied. The color of the hand soon improved. The patient rallied perfectly. He ate and rested and slept, and made no complaint, only calling to me each day with a joke and a laugh, "there has been no secondary hemorrhage yet." So day by day he improved until we could shake hands and congratulate him upon the fact that no more chance remained for the dreaded secondary hemorrhage to occur. The drain was removed early but suppuration occurred about the sternal fragment of the clavicle about two weeks after the operation and it had to be removed. The outer end held and lived.

He resumed his duties as an engineer November 1, 1906 and has been steadily working ever since. There is a strong right arm and shoulder and he can handle his engine as well as ever. The radial pulse was first noticed in March, 1907, when he was presented before the Jackson County Medical Society for examination. I believe the collateral circulation was established as follows:

I. ABOVE. 1st.—The blood of the ligated vertebral is soon replaced by anastomosis with its fellow of the left and with anastomosis with the thyroid axis on the left. 2nd.—The anastomoses of the ligated thyroid axis are maintained and blood is passed to the branches of the axillary.

II. BELOW. The intercostal arteries anastomose with the superior thoracic, long thoracic and subscapular. There are other small channels about the shoulder in such a healthy, well-developed subject, which nature may make use of to re-establish the normal current of the arm.

Suffice it to say that the circulation is now fully restored and the man has as good an arm as he ever had so far as I can determine.

The case is reported in the hope that it may encourage others to attempt the cure of such cases rather than to leave them to the suffering and death that comes of uncured aneurism.

DISCUSSION.

Dr. J. D. Guyot, of Jefferson City: I believe an exception may be taken to the unqualified statements made by the doctor, that med-

ical treatment should in all cases be abandoned and condemned as worthless. While I agree with him that in every case where an aneurysm is so situated that we can ligate it surgery should be attempted; still we as surgeons should not abandon all hope of some attempt to cure an aneurysm by medical means, for there are certain aneurysms, in certain sections, where you cannot offer any hope whatsoever by surgical means. Take, for instance, an aneurysm which I saw about a year ago in the descending arch of the thoracic aorta, where it would have been impossible to ligate. Something certainly in those cases must be done in the way of medical treatment. This aneurysm was very interesting from the fact that one man wanted to open it for an abscess. In this case, all medical means were tried, but the aneurysm finally eroded and burst. I do not believe that gelatin offers much hope. I have never seen any good results from the starvation treatment, and it may be practically said that surgery offers the only hope; but in those cases where we cannot attack them surgically, we must look for something in the way of a medical treatment.

Dr. H. C. Dalton of St. Louis: Seventeen or eighteen years ago, while at the City Hospital, I operated on a case of aneurysm of the subclavian, and my patient got well. I lost sight of him for a number of years. I saw him again just last week, when he returned to me with an aneurysm as large as a hen's egg. He stated that he had remained well for about a year after the operation at the hospital, when the neuryism returned and had been there ever since. I do not know exactly whether it is in the thoracic artery or not; it is very difficult to tell, and I only report this case as another case of apparent cure after a short while. I never heard of a case in the subclavian artery returning. I cannot understand how it did, but apparently it did. Of course it may have returned in one of the collateral branches.

Dr. H. E. Pearse of Kansas City: I have nothing to say except that if the gentleman adheres to his decision to operate upon all operative cases, I certainly shall not withdraw from him any hope that he may have to hold out for medical treatment. Those patients are in just about as horrible a condition as they can be, and if there is any hope to be held out to them, I shall be glad. I will say for Dr. Dalton that if my patient has a recurrence I shall have to stand on my rights and say that it is not in the subclavian artery.

THE DIFFERENTIAL DIAGNOSIS BETWEEN "CHOREA MINOR" AND "TIC."^{*}

BY WILLIAM W. GRAVES, M. D., ST. LOUIS, MO.

The time was, even in the recent past, when the term "chorea" was applied to several conditions, which to-day may be readily differentiated from each other. It is one of the triumphs of modern neurologists to have successfully differentiated chorea minor from other conditions resembling it. The condition formerly called "habit chorea," "habit spasm," "myospasia impulsiva" or "Gilles de la Tourette's disease," but more recently classed under the euphonious (?) name "tic," has in certain particulars, on superficial examination, a striking resemblance to chorea minor. Gilles de la Tourette, Brissaud, S. Weir Mitchell, Oppenheim, Gowers, Patrick, Meige and Feindel, and especially the last named authors, have so clearly described tic conditions, that their differentiation from chorea minor should no longer be a difficult matter; yet this differentiation is not made as often as it should be made. Tic is a common and widespread disorder, almost, if not quite, as common as chorea minor; and since it was, until recent years, always called chorea, it is not to be wondered at that it is still frequently so diagnosed. But chorea minor is rarely called tic. In such a case no serious harm can ensue because chorea minor being an acute, infectious and self limited disease, tends to spontaneous recovery, whereas the nature of tic is such, that it tends to perpetuate itself and therefore the erroneous diagnosis chorea minor in a case of tic may mean the promotion of invalidism. A correct diagnosis in chorea minor is *not*, but in tic *is* absolutely essential to the patient's welfare. This fact alone was sufficient incentive for me to choose as a subject for this occasion the title of this paper. An additional incentive for bringing this subject to your attention is, that I am constantly meeting, in both clinic and consultation practice, cases of tic of recent and long standing, which have been erroneously diagnosed as chorea minor. I have recently had the gratifying experience of guiding to complete recovery a patient who had been a victim of tic for eleven years and whose case had been repeatedly diagnosed and treated as chorea minor. The differential diagnosis between chorea minor and tic is not difficult—indeed it is a very easy problem—and requires for its solution no special training. It is one that any physician can readily make if he will only take time for observation. Some one has said "more mistakes are made in diagnosis—many more by not *looking*, than by not *knowing*," and this saying finds justification in the differentiation between chorea minor and tic, since with no information other than that obtainable by "looking" the differentiation should be readily made.

^{*}Read at the Fiftieth Annual Meeting of the Missouri State Medical Association, Jefferson City, May, 1907.

That this subject may be succinctly placed before you for discussion I have set down in parallel columns the salient points of contrast and resemblance which may guide one in the differentiation between chorea minor and tic.

CHOREA MINOR.

1. General nutrition suffers early in chorea—the patient growing pale and anaemic and he shows early loss of weight.

2. Expression, when face is quiet, is vacant, sullen and often stupid.

3. Disposition, is, as a rule, morose and depressed—but it is often characterized by great irritability.

4. Attention not necessarily but usually is somewhat diminished.

5. A heart murmur is rarely absent throughout the course of the disease and unless previously present, is due to the choreic process.

6. The respiratory function is often disturbed in chorea—the respirations becoming so unequal and irregular, that a normal respiratory excursion rarely occurs and the expiratory phase is often *explosive*.

7. If the muscles of articulation are involved in chorea, speech is often indistinct, difficult and momentarily impossible. Coprolalia and echolalia are never present in chorea.

8. Choreic movements are never confined to one part of the body throughout the course of the disease, though they usually *begin* in arm, face or leg, and then rapidly extend to other parts; they may be onesided in the beginning but they usually become general.

9. Choreic movements are never confined to synergically associated muscle groups, they are indefinite, vary in intensity and frequently occur in individual muscles.

10. Voluntary movements with the affected parts show a constant though variable degree of inco-ordination.

11. Choreic movements are involuntary and these movements show more or less inco-ordination.

12. Choreic movements are not lessened, but are usually increased by any voluntary effort to control them.

13. A choreic involuntary and inco-ordinate movement is a purposeless movement and was never imitative.

TIC.

1. Tic has no effect on general nutrition and this is usually good. Weight is not affected.

2. Expression is as a rule quick and vivacious.

3. Disposition is usually lively and is frequently childlike.

4. Attention is constantly diminished.

5. A heart murmur, unless previously present, is never found in tic and it is never due to the *tic* process.

6. The respiratory function rarely shows disturbance in tic and never similar to that in "chorea."

7. The muscles of articulation are never involved in *tic*—and coprolalia and echolalia are often present.

8. Tic movements are usually confined to a single part of the body but they rarely become general.

9. Tic movements are invariably confined to synergically associated muscle groups, they are definite and occur repeatedly with varying intensity, in the same muscle groups, but never in individual muscles.

10. Voluntary movements in *tic* are never inco-ordinated.

11. Tic movements, as a rule, are not consciously but *subconsciously* voluntary and they are never inco-ordinated.

12. Tic movements are lessened and may be entirely controlled for a variable period of time by voluntary effort—the oftener the effort, the greater the control.

13. A tic movement in the beginning *was* either a purposeful or an imitative movement.

14. Any voluntary movement exaggerates the choreic movements.

15. Choreic movements are increased in emotional states.

16. Choreic movements are always exaggerated when the patient is in the presence of others and less when he is alone.

17. Abnormal associated movements are always present in chorea.

18. Choreic movements are always unpleasant to the patient and are never accompanied by feelings of satisfaction.

19. In chorea minor frequently apparent, but rarely actual weakness in certain muscle groups occurs.

20. Choreic movements can not be imitated.

21. Chorea minor with or without treatments tends to complete recovery within from two to six months.

22. Chorea minor is a disease.

14. Any voluntary movement usually lessens the tic movements.

15. Tic movements are usually lessened in emotional states.

16. Tic movements are usually lessened when the patient is in the presence of others and aggravated when he is alone.

17. Abnormal associated movements are never present in tic.

18. When an inhibited tic movement gives way to the desire to tic, the ensuing tic movement is accompanied by feelings of satisfaction and pleasure to the patient.

19. Neither apparent nor actual muscle weakness is ever due to tic.

20. Tic movements may be readily imitated.

21. Tic unrecognized and unaided never tends to recovery, but naturally to perpetuate itself and it may last a life time.

22. Tic is a habit.

DISCUSSION.

Dr. William Engelbach, St. Louis: The diagnosis in these conditions is a very important matter. The treatment being so directly opposite, the one a teaching of the patient, the other a hygienic treatment and, according to some authorities, a medicinal treatment, the matter of differentiation becomes a necessity. The general nutrition of the choreic patient is one of the most important factors. In this condition, characterized by a more or less secondary anemia, there is always more or less change in the blood that it is necessary to correct. This is entirely absent in tic. It is a very interesting thing to try to explain the heart murmur in chorea, whether this murmur is due to an organic lesion of the valves or whether it is a hemic murmur or whether it is really due to a process of spasmodic contraction of the musculi tendinae that govern the valves. At least it is a very difficult thing to account for. There is no doubt that in some cases there is an organic lesion in chorea. The respiratory symptoms Dr. Graves gave are very interesting because they are not mentioned by most authorities. The irregular explosive respiration may be accounted for by the affection of the respiratory muscles that are under the control of the will. It is a question whether these same contractions occur in the involuntary muscles. I think it is a fact that we have a considerable number of heart murmurs that persist after the chorea has passed and for that reason, though we cannot explain the action of the drug, I think the salicylates are indicated in every case.

Dr. John Punton, Kansas City: The paper is of interest to the general practitioner. Medicine is a progressive science and one of the principal results of all scientific advancement is the power of mak-

ing finer discrimination in diagnosis, and any two diseases that can be subjected to at least twenty differentiations are certainly worthy of consideration.

Dr. Graves has illustrated in his paper one of the most practical facts in reference to tic, on the one hand, and chorea minor, on the other, and that is, the difference in prognosis. He emphasizes the fact that tic is simply a habit spasm, while chorea is due to some inherent cause which may be permanent, so it is very important to tell the difference. They have quite a number of things which are common to each, but others in particular, so that it is possible to differentiate. He failed to enlarge upon the etiology. The treatment of these two diseases, however, is practically the same; one may be permanent, the other only temporary, and I think it is highly essential that the general practitioner become familiar with the differential diagnosis.

Metropolitan Building, Grand and Olive.

THE SURGICAL TREATMENT OF TUBERCULAR PERITONITIS: WITH REPORT OF CASES.*

BY H. C. DALTON, M. D., ST. LOUIS.

Tuberculosis has for many centuries been man's greatest and most devastating scourge. The universal, thorough and painstaking studies which have, during the past few years, been accorded the affection, have been productive of brilliant results. Today the laity, as well as the profession throughout the civilized world, are cognizant of the important fact that tuberculosis can be not only prevented, but, when recognized early, and cared for properly, it can be cured. It goes without saying that the secret of success is sanitation.

As early as Morgagni we find descriptions of tubercular peritonitis, with the important assertion that it frequently occurred with pulmonary tuberculosis. Tubercular peritonitis possesses the peculiarity of varying remarkably in its morbid manifestations. It may appear as a few scattered nodules over some portion of the peritoneal surface, with concomitant ascites; there may be extensive and very dense adhesions; or it may present as a fibro-plastic or suppurative process.

Wunderlich studied the records of five hundred cases and found that the pathologic findings vary considerably according to the purity of the infection and the resistance of the tissues involved. 68 per cent. of Wunderlich's collected cases were of the exudative, 27 per cent. of the fibroplastic and 4 per cent. of the purulent type.

At present it is conceded that tuberculosis of the peritoneum is practically always of secondary origin. Primary tubercular perito-

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nitis is undoubtedly of rare occurrence. Borschke examined the reports of 226 cases: in only two instances did it seem probable that the disease originated in the peritoneum. The consensus of opinion is that infection usually occurs by way of the appendix. Fallopian tubes, uterus, perforated ulcer, or caseated mesenteric gland.

Mayo holds that tubal infection usually presents the purest type of tubercular peritonitis—miliary with ascites. Abbe thinks that 66 per cent. of such cases are due to infection of the thoracic lymph nodes.

Rotch has observed that in children the infection usually originates from tubercular mesenteric lymph nodes.

Cummins has recently stated that in the female, genital tuberculosis is responsible for 40 per cent. of the cases. Bybee, on the contrary, maintains that infection through the female genital tract is rare.

Tubercular peritonitis is of not infrequent occurrence. Grawitz and Bruin observed the presence of peritoneal involvement in 184 of their 13,922 autopsies. While Cummins found tubercular peritonitis in 2.7 per cent. of the 3405 cases studied by him.

Bybee observed its presence in 30 of his 872 autopsies. The literature of recent date tends to prove the erroneousness of the contention that the disease is of more frequent occurrence in females than in males. Cummins and Bybee agree that the disease is more frequent in males than in females. Cummins places the proportion at 2 to 1, while Bybee contends that the disease is two to four times as frequent in males as in females. The findings of Vierordt, Sick and others seem to bear out the contention of Bybee.

Tubercular peritonitis may appear at any age. The disease is relatively frequent in children, although statistics show that the patient is most often between the 20th and 40th years. Rotch says: "Those forms of peritoneal tuberculosis which show a marked inflammatory condition, either with or without ascites, are more common in children than in infants. In infants it is more common to have a miliary tuberculosis of the peritoneum in the course of a general tuberculosis which does not as a rule show abdominal symptoms." The symptoms of tubercular peritonitis are frequently obscure and quite misleading. The most constant and valuable symptom is pain in the lower abdomen. Kelly pins a great deal of faith to the presence of pain in the lower abdomen on micturition, or in walking. Fever of an irregular type is fairly constant. The general symptoms are pain, irregular fever, emaciation, anemia and vomiting; the local manifestations are ascites, constipation or diarrhea, and change in contour of abdomen. The palpating hand may detect presence of friction rub, or rectal examination may show tubercles in Douglas's pouch. Abdominal tenderness, emaciation, exhausting nausea and disturbances of intestinal function were prominent symptoms in Bottomley's 26 cases.

Kelly has emphasized the fact that emaciation is by no means to be always looked for in these cases. Too much importance must not be attached to the family history (Bottomley).

Mayo has observed that the patient frequently gives a history of more or less pain in the lower abdomen, which seems to be increased by peristalsis, and is relieved when the abdomen increases in size with fluid. With less fluid there is more rigid abdomen, which is often of board-like character.

Concerning the diagnosis, Johnson says: "There is no affection of the abdomen which may pursue a more latent course, and without any clear warning occasion a severe abdominal crisis, than tubercular peritonitis. The true cause of the severe abdominal crisis may remain latent, unsuspected, until an exploratory laparotomy has been undertaken. Tubercular peritonitis is, from a clinical point of view, a peculiarly imitative disease; there is hardly any acute abdominal affection which it may not, in one of its unsuspected forms simulate.

Roland Hill has reported a very interesting case of fibrous tuberculous peritonitis, leading to complete obstruction of the intestine, with the formation of a large mass distinctly discernible from the outside of the abdomen. Simple laparotomy not only relieved the distressing symptoms of obstruction, but apparently completely cured the patient.

In Nietert's remarkable case the symptoms of intestinal obstruction were due to the very dense and constricting adhesions resulting from a healed tuberculous ulcer of the intestine. It was necessary to resect 33 inches of the bowel. The patient recovered.

Johnson cites four very interesting and instructive cases in which acute intestinal obstruction occurred during the course of tubercular peritonitis. In one instance laparotomy revealed strangulation due to a band, while in a second the symptoms were found to be due to a large caseous gland pressing upon and strangulating a coil of small intestine by pushing it forward beneath a fibrous band. In the third instance cited by Johnson the obstruction was due to a thrombosis in some part of the distribution of the mesenteric vessels. In his fourth case laparotomy revealed firm adhesions dragging upon and obstructing a coil of intestine.

Morris has mentioned that in cases showing inflammatory process in the region of the Fallopian tube, it was quite probable, if abortion and gonorrhea could be excluded, that the patient had tubercular peritonitis.

Caille bases the diagnosis upon the abdominal symptoms, such as distention and pain and disturbed bowel action, emaciation, and the presence of ascites. Fever was present in all of his 13 cases.

My personal experience has been that it is not always possible to make a diagnosis. In many instances, especially where the peritoneal process is secondary to a tuberculosis of the lung or pleura, the clinical picture of the primary trouble, combined with the abdominal pain associated with ascites, will render a diagnosis fairly easy. The mere fact that the patient has a pleurisy is of import. The vaginal dis-

charge may clear up the diagnosis. In some of the cases it will be necessary to make the diagnosis by exclusion.

Sir Spencer Wells revolutionized the treatment of tubercular peritonitis when he unintentionally operated upon a patient in whom ovarian disease had been diagnosed.

Van de Walker was perhaps the first to introduce laparotomy as a curative measure in cases of tubercular peritonitis. Koenig did much to popularize the method.

When the abdomen has been opened the presented picture points quite clearly to the source of the disease. We are guided by the congestion, increased matting of the miliary deposits, or increase of general adhesions. I cannot lay too much stress upon these facts.

When the appendix is the seat of trouble, the glands of the mesenterium are very much enlarged. Mayo says: "A tubercular appendix at an early stage, before miliary deposits appear, may at times be diagnosed at operation, by the large size of the glands of the mesenterium. Murphy has mentioned the fact that in tubercular tubes the fimbriae are opened and turned out, while in gonorrheal or mixed infection they are turned in and closed.

It is very essential that the greatest possible care be taken not to open the bowel while separating plastic adhesions of the intestines, since they are the most difficult fistulae to close and very often result fatally. The least amount of damage will be done if the operator keeps as close to the parietal or pelvic peritoneum as possible while exposing the affected region.

It may be possible to evacuate a tuberculous mass and apply iodoform emulsion in glycerine to the diseased area, then closing the abdomen without drainage.

Simple evacuation of the fluid, excision of the primary focus where possible, and closure of the abdomen without drainage, will yield the best results. I fully concur with Mayo Robson that many of the recurrences following laparotomy have been due to the failure to excise the original focus in the tubes, appendix, ovaries or bowel. Just how laparotomy cures such cases remains obscure. Some writers would have us believe that laparotomy raises the opsonic index. The future must disclose the true secret.

Does the exposure of the peritoneum to the light or air, have anything to do with the cure, either by absorption or otherwise?

The prognosis depends largely upon the source of infection, the anatomic form that the disease assumes, and whether or not the primary focus is fully excised.

Sir Walter Cheyne contends that laparotomy is indicated in most all cases. He says: "There is no form in which we can say that laparotomy is absolutely useless."

Case No. 1. My first patient, John J. W., a young man 28 years of age, was treated during my superintendency of the St. Louis City

Hospital, and gave the following history: During the past few months he had been troubled with malaise, loss of appetite, more or less constant fever and a slight cough; and had noticed that he was becoming emaciated. His friends had called his attention to his jaundiced appearance and the gradually increasing abdominal distention. The patient stated that his parents were alive and in good health; there was not a history pointing to tuberculosis. Examination revealed the presence of ascites, and of a large mass in the region of the gallbladder. Exploratory laparotomy in the presence of Drs. N. B. Carson, F. J. Lutz, W. A. McCandless and the hospital staff, showed free fluid, and the presence of a large and firmly adherent mass, which later was pressing upon and evidently obstructing the common duct. The common duct was liberated by breaking up the adhesions, the abdominal cavity flushed with warm saline solution and the abdomen closed without drainage. The result was almost miraculous. The patient gained rapidly in flesh, the jaundice disappeared quickly, and the patient was discharged cured. It was my good fortune to see him several years thereafter, at which time he was enjoying good health.

Case No. 2. Mrs. J. McK., aged 70 years was seen in 1900 in consultation with Dr. Ellis of Springdale, Ark. The patient's family and personal histories seemed practically to exclude tuberculosis. In fact the symptoms and physical findings pointed clearly to carcinoma in the region of the hepatic flexure. Laparotomy revealed the presence of a very large tumor just below the liver; the mass was so firmly adherent, and the appearance of the growth seemed to point so clearly to inoperable malignancy, that the abdomen was closed promptly and the patient placed in bed with the conclusion that death was close at hand. Imagine my surprise when I learned, several years later, that the patient had recovered. Her son mentioned in writing me, that he believed the condurango which he had administered after the operation, was responsible for the cure,—another feather in the cap of condurango.

Case No. 3. Shortly after operating upon Case No. 2, I was consulted by a young man, 27 years of age, who complained of symptoms pointing clearly to acute appendicitis. At the operation the appendix was found very much congested and thickened; the glands of the mesenterium were very much enlarged, and the peritoneum was everywhere studded with miliary tubercles. I concluded that the appendix was the primary focus of the peritoneal tuberculosis. Excision of the appendix, irrigation of the abdominal cavity with warm saline solution, and closure without drainage brought a permanent cure.

Case No. 4. Mrs. McC. aged 30, was in 1905 seen in consultation with Dr. D. S. Booth of St. Louis, Mo., who had secured the following history: Family history showed tuberculosis; patient had enjoyed fairly good health until some few months previously, at which time she took cold and was troubled with an annoying cough; an attack of

acute bronchitis followed shortly thereafter, from which time the patient dates her present trouble. She has complained of more or less constant and severe pains in the lower abdomen. An irregular fever has been noted. Pressure upon the abdomen was productive of pain. During the past few weeks the abdomen had become greatly distended and the patient had lost considerable flesh. Dr. Booth had made the diagnosis of tubercular peritonitis. At the time of operation the patient's abdomen was larger by far than that of a woman at full term. Median laparotomy was, with the assistance of Drs. Booth, Hill, Neville and Babler, performed on Thanksgiving Day. More than two gallons of straw-colored fluid were evacuated; the peritoneum was everywhere studded with miliary tubercles. After evacuation of the fluid and irrigation of the peritoneal cavity with warm saline solution, the abdomen was closed without drainage. The recovery was as uninterrupted as the cure was permanent.

DISCUSSION.

Dr. J. D. Griffith, of Kansas City: I was very much interested in a paper read on this subject not long ago in New York, by Dr. Morris. He had made quite an extensive number of experiments on dogs, in which tubercular peritonitis had been brought about by introduced tubercle bacilli, and in which he had also introduced the pure culture, and had succeeded in having these dogs get well from tubercular peritonitis, those who had not had the pure culture introduced, and those who had been relieved. I have operated on three cases of tubercular peritonitis, which I have only opened up. In one of them I did not even wash out with the saline solution. One was the plastic kind and did not get well; the other two seem to have gotten well, and I have been hoping some gentleman would tell us if he knows why it is that they do get well occasionally.

Dr. A. H. Cordier, of Kansas City: The question as to cure of these cases following the operation is one that has, of course, perplexed all who have entered into the study of this subject. Numerous theories have been advanced as to the method of cure. The simple opening of the abdomen and admitting the air and the ever-present saprophyte, has been one of the theories most generally accepted as to how these cases were cured following a simple incision. In the cases I have had, it seems to make no difference what is done in the case. The great majority recover by the simple opening of the abdomen and taking out of the fluid. The majority of these cases which I have had have been cases that had no fluid in the abdomen, the dry, fibrous sort, in which all the organs of the abdomen were so adherent that it was almost impossible to liberate the imprisoned organ. Often, in the presence of adhesions of this kind, they have recovered. I remember one case, in which I was compelled to take out some 36 or 38 inches of the intestine, with recovery of the patient. Even after I

had done this. I thought it would not do to separate too many of the intestinal adhesions, and every time I would attempt to break up one of these adhesions I would get into the bowel and have to stitch. I gave this case up as hopeless, but much to my surprise the patient recovered and remained well for years afterward, and is living yet. It doesn't seem to make any difference whether you wash out with saline solution or not; these cases recover anyway. In my opinion, a factor in the cure of these cases that has not been generally recognized, and about which very little has been said, is that the direct traumatism by the opening the abdominal cavity and handling the intestines and the viscera, is a means, directly or indirectly, of stimulating and bringing a new blood supply to the heart, and that ever increasing number of phagocytes—or whatever we may see fit to term those agents in the blood that are capable of destroying bacteria—has a great deal to do with the cure of these cases.

I do not agree with the doctor's statement that the majority of these cases come from the fallopian tube. I have never seen a single instance where the appendix or the fallopian tube was involved. It seems as though it is a disease that comes up just like any other disease, and we are not able to trace its source—evidently disseminated through the abdomen, probably from the blood itself. None of these cases should be given up as hopeless. The absence of symptoms is one noticeable phase, and many of these cases you will find as surprises while operating for the relief of other forms of pathology.

Dr. C. H. Wallace, of St. Joseph: Doctor Cordier claims that he had some cases of dry tubercular peritonitis in which a cure had resulted from opening the abdomen. He then said it was the exudative variety. The point to which I wish to call attention, is that in the cases where we find the exudative variety that improve from surgical interference, either liquidation had been present and had been absorbed, or it would have taken place if the case had gone on farther, and the pathology is the same as in the effusive variety. In talking over this question with a surgeon who has had a very extensive experience in this class of cases, I asked him which ones he regarded as operative and which not. He said that in his experience the dry variety had given negative results, except in a few cases where the process was local and could be excised, and in these he had gotten some gratifying results. My understanding is that, in the dry forms of tubercular peritonitis, the experience of operators in general has been negative as to encouraging results and these forms are considered medical cases.

Discussion concluded by Dr. Dalton: The case which interested me most was the old woman 70 years of age. I forgot to state that there were no tubercles of the mesentery. In fact, I did not handle the peritoneal cavity. I simply noted the fact that there was nothing else involved, and closed up. I believe Dr. Cordier's remarks are the best explanation we have as to the cause of the cure of these cases. Why does such a simple procedure cure so grave a disease? That it does do so we know.

A PLEA FOR THE CROSS-EYED CHILD.*

BY JOHN GREEN, JR., M. D., ST. LOUIS, MO.

Why is it necessary to enter a plea for the cross-eyed child? It is because, in my experience, and, I dare say, in the experience of my colleagues in ophthalmology, the cross-eyed child is denied a "square deal." As a direct result of improper advice given the parent the child is permitted to continue indefinitely bearing a serious deformity, resulting finally in partial or almost total loss of vision in the crossing eye. It is seldom indeed that the oculist is given the opportunity of proffering his skill to the unfortunate little one until some years have elapsed from the time the squint was first observed—years of priceless value if properly employed for the child's ocular welfare, but alas, how frequently allowed to slip by, with no effort made to remedy the defect.

Whence arises this deplorable state of affairs? Surely not with the child and only indirectly with the parent. The young mother with the few months' old babe in her arms is alarmed to see the little one's eyes turning in, perhaps momentarily, perhaps for several minutes at a time. As is well known, the motor co-ordinations of the ocular muscles are at first somewhat imperfect, and hence a transient strabismus is rather the rule than the exception in young infants. When appealed to by the anxious mother the family physician is able to give the assurance that "all will come right in time"—a prophecy almost invariably fulfilled.

After the child has passed the earliest period of infancy, has attained the age of one to five years, the mother will perhaps notice that at times one eye or the other does decidedly turn toward the nose. At first the squint is periodic and of short duration, followed by intervals during which the eyes appear entirely straight. The mother, recalling the doctor's early advice, naturally believes it again applicable, and confidently awaits the time when the eyes shall again be straight. A few months later she is disturbed to find that the squint which was at first noticeable only when the child was sick or fatigued from play, has become permanent. The crossing may be wholly confined to one eye, the other remaining straight (monolateral squint) or the crossing may alternate, shifting from one eye to the other, and constituting the so-called alternating squint. It is at this stage that the family physician is again appealed to. Upon his advice will depend the future ocular welfare of the little one. It will be well if he realizes the weighty responsibility resting upon him and justly endeavors to frame an answer in consonance with our knowledge of this affection.

*Read at the Fiftieth Annual Meeting of the Missouri State Medical Association, Jefferson City, May, 1907.

I can readily see how the physician who daily encounters the stern realities of the battle of life with death should regard a pair of cross-eyes as a trivial ailment, too insignificant for his serious consideration. That it is of vital significance to the afflicted child I hope to be able to show you shortly.

The oculist rarely sees the squinting child when the squint first manifests itself. Almost always there is history of neglect, of delay, for several years. Why is this so? I have made careful inquiry in all cases that have come under my observation during the past six years and the conviction has been borne in upon me with ever increasing intensity that the advice given by the family physician has been largely instrumental in depriving the child of the opportunity of getting a full measure of relief. Now, what is the tale that the parent unfolds to the oculist? It is something like this: "Yes, doctor, little Johnny began to be cross-eyed right after he had the measles and we laid it to that. We took him to our family doctor and he said: Well, don't bother about that. The eyes will become straight of themselves after a while." The advice varies: "Yes, the child is cross-eyed and he will have to have glasses, but they can't be fitted to him until he is a good deal older." Or "Nothing can be done at present. When he is fifteen years old one of the eye muscles will have to be cut; that will straighten his eyes." Sometimes the assumption is that the external rectus muscle is paralyzed and that internal treatment is indicated. Whatever form the advice takes it leads to an identical result. The mother, assured that some time in the future "something can be done," does not pay any more attention to the matter, and the golden time which should be occupied in intelligent and unremitting treatment of the eyes is frittered away in total neglect.

Now, I do not hesitate to affirm that any such advice as detailed above is absolutely pernicious. Surely if the family physician were at pains to understand the etiology of convergent squint, he would never be guilty of uttering opinions so entirely at variance with our knowledge of this affection. The earlier view that convergent squint was essentially of muscular origin, in other words that it depended upon shortening of the internal recti, faulty insertion of their tendons or paralysis of the external recti, has been thoroughly disproved. Those facts which definitely indicate that the muscles are not primarily at fault are the following: (First) the power of the outward rotation of the squinting eye is perfect or nearly so; (second) a squint frequently disappears during general anaesthesia; (third) a high degree of convergence may disappear when the accommodation is paralyzed by atropin and will reappear when the effect of atropin wears off.

Donders, the great Dutch ophthalmologist, propounded the view that hypermetropia was the fundamental cause of squint. He was led to this conclusion by the following considerations: When the gaze is

transferred from a distant to a near object the eyes "focus" or "accommodate" so as to bring the image of the object sharply upon the retina. This focusing or accommodating power is accompanied by a convergence of the visual axes, which are then directed exactly to the object viewed. The functions of accommodation and convergence are thus associated, although their association is somewhat elastic. Normal sighted or emmetropic eyes when looking at a distant object are eyes "at rest," and do not require any focusing in order to see clearly. When such eyes look at an object only twelve inches away they accommodate or focus to a distance of twelve inches, and converge just sufficiently to permit their visual axes intersecting at the object. The nervous impulse required to focus the eyes at twelve inches is just sufficient to converge their visual axes to intersect at this point. Far sighted or hypermetropic eyes when looking at distant objects are not "at rest," and require a certain amount of focusing power in order to see clearly. When such eyes look at an object only twelve inches away, the amount of accommodative effort is equal to the amount required for emmetropic eyes plus the amount which has already been brought into use for the distant object. There is, therefore, an excessive accommodative power required which implies a greater nervous impulse. Now the function of convergence receiving the additional nervous stimulus is made to act too strongly and there is a tendency for the visual axes to converge to a point nearer than twelve inches. Donders assumed therefore, that hypermetropia was at the root of the evil, was, in fact, the fundamental cause of squint.

The theory of Donders was unquestionably a great step in advance, but failed to account for many of the observed facts.

It is known that the vast majority of children are hypermetropic and yet very few squint. Again, that high degrees of hypermetropia do not tend to cause squint, and lastly that the degree of refractive error has very little to do with the question whether the patient shall or shall not squint in the first instance. It remained for Claude Worth, an English ophthalmologist, to supplement the work of Donders and to point out that the essential, the fundamental cause of convergent squint lay in a defect in the "fusion faculty." Now what is the fusion faculty? It is that faculty which enables us to blend mentally the images received on the retinae of the two eyes. Worth's investigations indicate that the fusion faculty is absent at birth, the normal positions of the eye being maintained at first by the motor co-ordination. As early as the sixth month there is evidence of vision with the two eyes, or binocular vision. The faculty is complete before the end of the sixth year. Worth states that when the fusion faculty is well developed "nothing but an actual muscular paralysis can cause an eye to deviate." He states further that in some cases "owing to a congenital defect, the fusion faculty develops later than it should, or it develops very imperfectly, or it may never develop at all." In such

cases anything which disturbs the balance of the motor co-ordinations will cause squint, and such disturbances, in the order of their importance, are (1) hypermetropia; (2) unequal refraction in the two eyes; (3) congenital amblyopia; (4) a tendency of one of the eyes to turn up or in; (5) specific fevers; (6) convulsions or severe fright; (7) hereditary influence.

In brief, a child begins to squint because in the first instance its fusion faculty is poorly developed or entirely absent. Contributing to this end are the various causes enumerated above. Let us consider now what the conditions are at the *very beginning* of a case of concomitant convergent squint. The eye which turns in possesses, in the majority of cases, almost as good vision as the eye which is straight. It is only in the rare cases of congenital defective sight, or amblyopia, which recent investigations have shown to be due to hemorrhages into the retina at birth, that the defective vision has an anatomic basis. At this stage, if the squinting eye is forced into use, it will speedily regain the vision which it has begun to lose. It, however, the child is neglected, the vision of the squinting eye grows progressively worse, and may in time become so blind that the child is hardly able to count fingers when held a foot in front of the eye. When this stage has been reached it is usually too late to force the eye to take up its function again: it has become blind or amblyopic from disuse. It may safely be affirmed that only in those cases in which the educative treatment of the squinting eye is begun very shortly after the onset of the squint, will it be possible to bring about a complete restoration of vision. From this point of view alone it is absolutely essential that there be no delay in instituting treatment. Furthermore, the sooner the training to develop the sense of vision is begun, the better chance will the child have of acquiring full binocular vision.

How soon after the squint is observed should treatment be begun? *Just as soon as possible.* To quote Worth again, "In the case of a young child with a constant monolateral squint, the results of this disuse of the deviating eye is that its visual acuity gradually deteriorates." This deterioration from disuse is more rapid the younger the child. "A child with good vision in each eye who develops a constant monolateral squint at the age of six or eight months will in the absence of proper treatment become rapidly blind in the squinting eye. The loss of vision in the deviating eye is so rapid that the power of central fixation is often lost within eight or ten weeks." In an older child developing squint, the loss of vision is less rapid but none the less certain.

It is not my purpose to dwell on the treatment of squint. Suffice it to say that there are five therapeutic indications: First, to correct as accurately as possible any refractive error; second, to occlude the fixing eye, thereby forcing into use the deviating eye; third (for the same purpose), to instill atropin into the fixing eye only; fourth, to

train the fusion sense, and fifth, operation. A very widely held belief is that a child under four or five years cannot wear glasses. This is entirely erroneous. Worth records instances of infants under twelve months wearing correcting lenses with great satisfaction. At present I have under observation an eighteen months old child who came to me with a constant monolateral squint, who is wearing strong plus spherical lenses with apparent entire satisfaction.

It is only in cases where treatment has been possible from the very earliest period of the squint that a true cure can be accomplished. By "cure" I mean, not simply that the crossing eye shall be straight, but that the following additional conditions shall be fulfilled: First, that the formerly squinting eye shall have nearly or quite as good vision as the fixing eye; second, that the fusion faculty shall have been developed to the point of maintaining the highest degree of binocular vision. How very seldom this ideal result is attained, I am sure all ophthalmic surgeons will testify. Many a pair of cross eyes are made straight by glasses or operation, and this removal of the deformity may seem all sufficient to the unthinking. However, when we recall that in such cases the eyes have no ability to work together, and that one of these straightened eyes possesses only sight enough to count fingers held close to the face—is in fact to all intents and purposes a blind eye—our feelings of elation are somewhat dampened. Nor does it dispel our gloom to realize that all this might have been obviated, had the family physician properly understood his responsibility when advice was first sought.

The following cases illustrate types of strabismus as they present themselves to the oculist:

E. C. R., age six years. Father states that child's right eye has been noticed to cross slightly for about a year. There is a constant monolateral squint of about twenty degrees. In the right eye the vision is slightly below normal, in the left eye normal. Fusion sense present, but defective. After wearing glasses for compound hypermetropic astigmatism for six weeks the eyes were found to be entirely straight, and the vision of the right eye had again become normal. Training of the fusion sense was begun. At the end of three months the eyes are perfectly straight, the vision of each eye is normal and the child has full binocular vision.

M. A. M., age nine, had diphtheria five months ago, followed by slight turning in of the left eye with the complaint of double vision. Double vision disappeared in a week. (Evidently at that time a paresis of the left external rectus.) The mother states that for the past two months the right eye has turned in slightly. Examination shows the right eye convergent 15 degrees, and vision in this eye reduced to one-fourth of normal. The appropriate glasses (plus spherical) were at once prescribed, and the right eye forced to come back into use by placing a black screen in front of the left glass. Within

a month the right eye had regained almost all the lost vision and the left eye was crossing slightly behind the screen. Fusion training was begun at once and in a few weeks the child had developed full binocular vision. The eyes are now perfectly straight but vision in the right eye is still a little below normal.

D. E. H., age six years. Child's left eye has been crossing since the age of one year. Entirely neglected. Convergent squint about 25 degrees. Vision in the squinting eye reduced to one-sixth of normal. Appropriate glasses brought the eyes straight after a time, but no improvement took place in the vision of the left eye. This is a case where unquestionably the prolonged delay was responsible for the development of the partial blindness in the squinting eye.

G. B. S., age four. The right eye is said to have squinted since the age of nine months. A year ago he was taken to the family doctor, who said that the child was too young for treatment. He has therefore received none. In this case the appropriate glasses brought the eyes entirely straight, but the eye that had squinted is now only able to count fingers at two feet.

E. M., age eight years. This little girl has an alternating squint of four years' duration. There is no difference in the visual acuity of the two eyes and she fixes with either as well. All tests indicate a complete absence of the fusion faculty. Glasses appropriate to her refractive condition (low hypermetropia) diminish the degree of squint slightly, but do not abolish it. She will have to be operated upon eventually to bring the eyes straight.

The following case illustrates conditions after fifteen years of neglect:

R. M., age 20, has cross eyes since earliest years. She has worn glasses at times but for years at a time has been without them. Visual acuity in the squinting eye is reduced to counting fingers at two feet. A prolonged trial of glasses fully correcting her refractive error did not in any way influence the position or vision of the left eye. A tenotomy of the internus combined with advancement of the externus produced a first-class cosmetic result but of course had no effect on the vision of the squinting eye.

The last case which I wish to report illustrates in a striking manner how a life may be wrecked by neglect to appreciate the needs of a child with cross-eyes.

A. L., age 24 years. Left eye began to squint when he was four years old. He was entirely neglected and never consulted an oculist. Vision in right eye was good. Five months before coming under observation, while in an iron foundry, he received a splinter of steel in the right eye. The eye became infected and despite the efforts of a competent oculist was lost. The poor fellow was horrified to find that he was practically blind, the squinting eye having vision only suffi-

cient to enable him to count fingers at three feet. A year later he committed suicide.

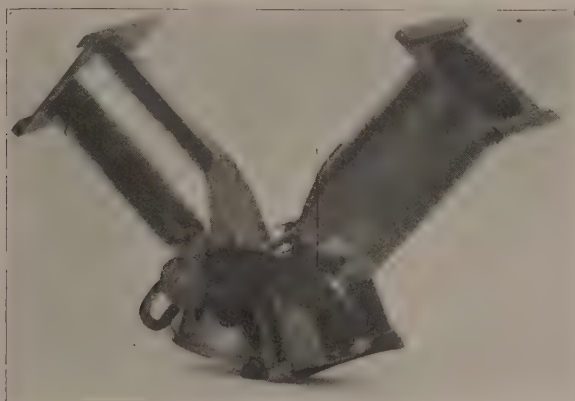
To recapitulate: Concomitant convergent squint can be definitely and completely cured only when managed from its earliest beginnings. Mere straightening of cross-eyes, after delay has permitted the development of amblyopia from disuse, falls short of an ideal therapeutic result. It is, therefore, the imperative duty of the physician whose advice is first sought to point out to the parent the disastrous results of neglect and delay and to insist strongly that treatment be instituted at once.

DISCUSSION.

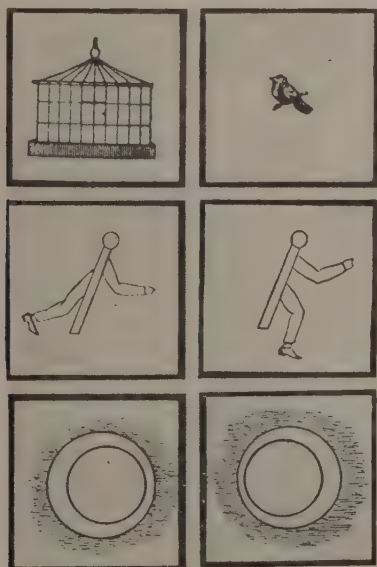
Dr. Llewellyn Williamson, Saint Louis:—I merely want to add my voice in substantiation of Dr. Green's conclusions that the average layman, and many physicians, believe the turning in of the eye is the greatest defect, while the truth is the gravest result is the deterioration of the visual power of the eye. I recall several patients in the Royal Ophthalmic Hospital, London, coming in with a squint and very much reduced vision. According to the custom of Mr. Worth, whose assistant I had the honor of being, the refraction was corrected and atropine ordered instilled twice daily into the sound eye only, the patient being ordered to return in two weeks for observation. Failing to return until months afterward when these patients were next seen it was observed that the original squinting eye had become straight and the vision normal while the previously good eye had taken on the squint and the vision retrograded. Putting atropine into the better eye only is much to be preferred to the old custom of putting it in both eyes. The squinting eye usually has the greater degree of ametropia and when atropine is used in both eyes the ability to use the squinting eye for near work is made even more difficult than the use of the sound eye, so that the result is worse than if no atropine at all be used, whereas, if we put it in the sound eye only the patient is compelled to use the squinting eye for all near work and this use, or exercise, of the squinting eye is all important in preventing deterioration of vision. The wearing of proper glasses is essential and they should be put on at the first sign of squint complicated with refractive error. I have seen babies in arms wearing glasses with short temple pieces fastening in the back with a piece of tape. The child very soon becomes accustomed to them and comes to regard them as a part of his clothing. If the glasses are broken they are merely cracked across and I know of no case where children's eyes have been injured by the breaking of them. Operative treatment in the cases I would consider only after all other means have been tried.

Dr. T. A. Coffelt: I wish Dr. Green would tell us his method of developing the fusion faculty.

Dr. Green: To indicate more fully the method of developing the fusion sense permit me to demonstrate the instrument devised by Mr. Worth. Now here is a slide bearing the picture of a bird cage



and another of a little bird. These slides are placed in the tubes in such a way that through one you see the bird and through the other you see the cage. On looking through the instrument at the light and on moving the tubes you will see the bird pass into the cage. This indicates that the eyes are, at least, seeing together. Here is another



set of slides; in this we have the figure of a man without his right leg and without his face; in the other slide we have a similar figure without the left leg and bearing a face. By moving the tubes back

and forth we finally reach a position where the images from the two eyes fuse and obtain the complete image of a man with two legs and a face. Finally we have this figure, one circle within another. One circle is displaced to the right and the other is displaced to the left. Now, when we view such pictures as these with the two eyes together we gain the impression of a solid object. In one position it gives the impression of a bucket with the end turned toward us, while in another position the end is turned from us. Many patients who are unable at first to do more than get simultaneous vision with the two eyes, will, after a few months' training, develop the ability to see objects in correct perspective.

Operative treatment should not be thought of until you have exhausted every other possible means of treatment. Each case depends upon individual conditions. If after several years you have been absolutely unable to effect a result, then the eye should be operated upon. But we should be very sure that all other means of treatment have been faithfully and persistently tried before resorting to operative treatment.

Dr Williamson, St. Louis: One point Dr. Green has failed to mention in the training of the fusion sense. When an eye squints the images fall on different portions of the retina and would cause diplopia were not the image in the squinting suppressed. That all of us have this power of suppressing an image can be demonstrated by looking at a distant object and holding the finger up before the face. Two fingers are seen and yet ordinarily when we look at objects at different distances we are not conscious of diplopia. In a squinting eye the image is suppressed and so in beginning to train the eyes of a patient with an amblyoscope it is difficult to get them to see both objects at the same time. This is done by increasing or decreasing the amount of illumination before each eye until the weak eye is able to take cognizance of its image.

Metropolitan Building, Grand and Olive.

RUPTURE OF THE BODY OF THE UTERUS DURING PARTURITION WITH REPORT OF A CASE.*

BY N. A. G. TESSON, M. D., KANSAS CITY, MO.

Rupture of the body of the uterus during parturition is one of the conditions which, while rare, is met with occasionally. The mortality following these cases is so great that it becomes of the utmost importance that this condition be recognized and the patient be given every chance to recover that surgical skill affords.

It is classed as one of the most dangerous accidents that can befall a woman.

Extra-peritoneal rupture of the uterus is of frequent occurrence. I have seen but one case that demanded immediate surgical attention. It is usually of no immediate danger to the patient, consequently it will not be considered further in this paper.

Intra-peritoneal rupture of the uterus occurs most frequently in the last months of gestation and during the second stage of labor. Any condition that causes a weakening of the walls of the uterus, such as over distension, a large child, excessive amount of amniotic liquid, or multiple pregnancy, undue pressure applied at any point of the uterus, destruction of tissue (as ulceration), trauma and many other conditions are active factors in producing this grave condition. It occurs more frequently in multipara than in primipara. It is claimed that age has but little influence in its production unless a retrograde metamorphosis be the result.

Some women it is claimed, truthfully no doubt, have very thin uterine walls. This in itself would render version a dangerous procedure.

A small pelvis, obstructions, as abnormal presentations, or tumors narrowing the parturient canal, are conditions favoring laceration. Among the exciting or immediate causes are any sudden expulsive effort, as coughing, sneezing or vomiting. I remember a case distinctly which gave me an ocular demonstration of the expulsive force of a sneeze well applied at the proper time and place. A lady was in the second stage of a tedious labor, when she gave a violent sneeze and precipitated an astonished child unceremoniously into the world.

We sometimes read and hear unkind insinuations, that certain cases of laceration were caused by careless instrumentation; but this is doubtless so seldom one of the causes that it is only necessary to remember the possibility of the evil of ill-directed efforts with instruments. Rupture of the uterus usually occurs at the end of a severe uterine contraction.

*Read before the Jackson County Medical Society, June 4, 1907.

The first symptom is usually an excruciating pain at or near the seat of the lesion. It may be possible to hear the snapping or tearing sound produced by the laceration. Ordinarily all uterine contractions cease at once and marked shock supervenes with all its alarming signs. There have been cases reported of patients in whom the shock was but slight, could feel the warmth of the escaping blood in the abdominal cavity and also detect the child in an unusual position. Hemorrhage from the vulva is by no means invariably present.

The diagnosis is easily, safely and quickly made beyond peradventure of a single pusillanimous doubt by inserting a well cleaned hand into the uterus and making a thorough examination of its walls for laceration or retained secundines. No mortal man lives who does not commit sins of omission far more frequently than he does sins of commission. The chief reason of this is cowardice, pure and simple. He down's reason and conscience and caters to that powerful irrepressible force known as public opinion, and many a woman is neglected and dies, or becomes a chronic invalid through this cowardice, and in this case, as well as those following "normal labor," as many cases are supposed to be, die later of sepsis when they could have been saved by introducing a hand, as near aseptic as possible, into the uterus and making a positive diagnosis of the condition present, and treating the case as indicated.

Regardless of the numerous criticisms this may invoke, I feel one-half inclined to make this paper "A plea for the finger." I feel that after more than twelve years' practice, the physician who hesitates to clean his hand as best he can in obstetrical cases and insert it in the uterus, is not only robbing himself of many hours of sleep that justly belong to him but is not giving his patients what is due them.

The treatment of these cases seems simple to me so far as what to do, viz: laparotomy followed by hysterorhaphy and as thorough cleansing of the abdominal cavity as possible. Some advise extraction of child through the natural passage by bringing it back through the laceration. This does not seem to be a rational procedure as it places the mother's life in greater jeopardy than does operative procedure at once. Some seven years ago I reported a case of ruptured uterus before this society, and I have the following report to make of another case.

Mrs. W., age 20, primipara, had given birth to a healthy girl baby. The labor was tedious, lasting it was claimed, over a period of three days; no forceps used. Patient did not do well after the labor. Grew gradually worse until August 3, 1905, three week later, when I saw her. Discharge up to this time was continuous and tinged considerably with blood and foul smelling.

Patient's temperature constantly above normal, 101° to 104° F.; chilly sensations, felt very weak, pulse quick and fast, had a tender condition of the uterus but no real pain, no tympanites, skin sallow

and an anxious expression. As there was no history of rupture we concluded that some of the products of conception were retained, causing the trouble present. Patient as soon as possible was placed under an anesthetic and upon dilation of cervix a grayish tissue, resembling fatty membrane, came into view; not at once recognizing what this really was, I drew it gently into view through the vulva and was greatly surprised to find I had omental tissue to deal with. The anesthetic was at once with-drawn and patient sent to the Agnew Hospital, where I immediately operated with the assistance of Dr. W. A. Shelton and Dr. F. H. Evans, anesthetist.

Upon opening the abdomen, I found the omentum incarcerated in a rupture, located at a point just posterior to where the left fallopian tube leaves the uterus. The rent was one and one-half inches long; no attempt was made to draw omentum back but it was ligated, cut off and the uterine portion removed through the vagina.

The laceration was closed with deep sutures of silk followed with Lembert suture of silk. Abdominal cavity closed with through and through sutures of silk. Patient made good recovery except irritable condition of abdomen, at site of operation, and later a sinus developed discharging pus. This condition continued for perhaps one week or ten days, when a silk suture was discovered presenting itself in the sinus. This was removed after which the sinus ceased discharging and healed.

Two years later patient gave birth to another child, going through labor satisfactorily to her physician, Dr. Evans, who attended her at this time, but not at the first labor.

CONCUSSION OF THE BRAIN.*

BY IRA A. MARSHALL, M. D., IRONTON, MO.

To properly understand thoroughly the different injuries to the brain, the magnificent home of the mind and soul of man, one should know its anatomy well; I presume you do, for the doctors of Southeast Missouri are the equal of those found anywhere in this grand domain of ours.

The brain, as you know, is divided into the cerebrum, cerebellum pons, and the medulla oblongata. These, with their subdivisions, are minutely connected with their arteries and nerves and covered by membranes. Taking all in all, a beautiful house, a home beyond the skill of human hands to build, or even to understand,—the great battery there located sending out into different parts of the body orders which are instantly obeyed.

From Galen down through the progress of the ages physiologists,

*Read before the Southeast Missouri Medical Association, May 8, 1907, at Fredericktown, Mo.

anatomists and scientists have spent their lives studying the human brain. The infant comes into this world without knowledge. As the days go by and the years roll on toward eternity the body develops, the brain commences to work. The first word uttered is anxiously looked for and oft remembered. "In the cortex, in the gray matter lies the power of thought."

Often have you heard it said that the size of the brain has to do with the intelligence. The average brain weighs about three pounds. Webster's weighed 64 ounces; Culver 66; Lord Byron 64; Gans, 53. Developmental cultivation has more to do with intelligence, perhaps, than size. Pathologists and diagnosticians have found that when certain portions of the brain are removed, certain motions or parts of the body refuse to co-ordinate. In this manner we are able to say that an injury on a certain part of the head will produce certain symptoms and results. Let us take for example "concussion of the brain."

The term, concussion, has long been used to designate the symptoms which follow vibration of the brain consequent upon blows received directly upon the skull, or transmitted through the spinal column. It was supposed that a man might die instantly from concussion of the brain, without receiving any physical lesion of the brain substance. This assumption, I believe to be false, for fatal cases of so-called concussion of the brain exhibit, on careful examination, contusion or laceration of the brain, separation of the dura mater from the bones, compression from clot, or some distinct lesion of the contents of the cranium. Death in cases in which no such evidence of brain injury has been found, has not infrequently been attributed to concussion of the brain, without an investigation of the spinal cord and heart. Fatal changes would probably have been found there. I admit the *possibility* of the vibration causing a molecular change in the nerve cells, the capillaries, or the cerebro-spinal fluid, which could not be appreciated by our ordinary methods of investigation, and which still might be capable of producing the symptoms shown in slight concussion; but when death occurs in cases denominated concussion of the brain, I believe that distinct lesions, if carefully sought for, will always be found.

If a vessel containing jelly, of the consistence of the brain and containing similar cavities, was forcibly struck, fissures could be easily produced in it by irregular transmission of the vibrations of force. So, I believe, do lacerations and contusions of the non-homogeneous brain occur.

In my opinion, then, concussion of the brain is not a functional condition, but is used to designate organic changes. The term, therefore, should be discarded for contusion or laceration.

Cases of slight concussion very much resemble a similar degree of that obscure condition called shock. It is, perhaps, possible that a sudden, moderate force applied to the head, containing cerebro-

spinal and sympathetic nerve centers, causes pallor, vertigo, and confusion of ideas by the same pathological change that occurs when peripheral nerves are injured.

When greater violence is offered to the brain it is to be expected that, in addition to the condition of shock, symptoms will be presented due to the laceration which necessarily occurs because of the jelly-like consistence of the brain.

Lacerations and contusions of the brain may be multiple, giving rise to numerous minute extravasations of the blood, scattered throughout the brain and scarcely distinguishable from the normal vascular points seen on section. On the other hand, hemorrhage from the torn vessels may be so great and so diffused as to produce symptoms of compression of the brain, thus greatly obscuring the diagnosis. The irregularity of the base of the skull causes laceration to occur most frequently in the corresponding region of the encephalon.

Direct violence to the head, or force applied to the legs or buttocks and transmitted through the spinal column to the cranial bones, is the cause of contusions and laceration of the brain.

A blow on one part of the cranium will often give rise to laceration of the brain at the opposite side without there being any marked injury to the cerebral tissue immediately underlying the bone struck. This is due to the soft consistency of the brain, and is termed contusion by counter-stroke.

When a slight blow has been received by the brain, the patient at once becomes giddy, is confused in his ideas, feels weak, staggers and perhaps would fall, if not steadied by grasping some support. At the same time his face becomes pallid, and his heart's action feeble. There is a feeling of nausea, and vomiting sometimes actually occurs. These slight cases do not exhibit actual unconsciousness, but the patient is "stunned," and for a moment is not able to collect his thoughts. He, however, promptly returns to his normal state. This is a condition in which it is possible, perhaps that no laceration of the brain, nervous structure or blood-vessels occurs; and such cases are those that resemble surgical shock of slight severity.

The violent shaking of the brain caused by the application of a severe force is followed by symptoms of gravity, which are due, in my opinion, to the production of contusion or laceration of the brain or its membranes. The patient is almost but, as a rule, not completely unconscious, lies motionless with a cold, pallid skin, has a feeble, fluttering pulse and heart, and sometimes passes urine and feces involuntarily. The insensibility is not a complete coma, for usually the patient can be roused by loud questioning to utter a monosyllable or groan.

The pupils vary in different cases as to contraction or dilation, and the two eyes may not be alike in this respect. Usually the pupils react to the stimulus of light. The breathing is quiet though it may

be feeble and shallow: there is no hemiplegia and the limbs if pricked with a pin will be withdrawn, though probably in a lazy manner. Vomiting is likely to occur as the patient begins to react from the semi-unconscious state which immediately succeeded the injury. Convulsions sometimes take place after such cerebral injuries.

The location of the contusion is an important factor in the determination of special injuries. The symptoms just described may last a few hours or a day, before signs of recovery or of progressive inflammation supervene. When return to health is to ensue, the symptoms of the brain contusion slowly subside, and the patient's functions assume their normal condition. It often happens, however, that headache, vertigo, impaired memory and other cerebral sequelæ remain.

When the issue of the injury is to be an unfavorable one, the patient either sinks into a comatose state, without reacting, or, if he does react, soon presents the characteristic symptoms of encephalitis.

The prognosis is grave in all cases of contusion of the brain, because it is impossible to define accurately the extent of the lesion and because even slight lacerations and contusions are liable to impair the mental functions and the special senses.

All injuries producing vibration or concussion of the brain, followed by the semi-unconsciousness mentioned, are serious, because there is organic lesion of the brain tissue.

Some writers speak of three stages of concussion of the brain, viz.: collapse, reaction, and inflammation. I object to this division, and, indeed, ignore entirely the term concussion of the brain, since I do not believe in the existence of a functional disturbance of the brain without organic lesion. Concussion of a muscle or bone causes a definite lesion called contusion, fracture, laceration; so concussion of the brain, if it produces symptoms, must cause an organic lesion. In cases subjected to a careful autopsy such lesions are found though it is possible that instances may occur in which organic change is too slight to be appreciated by our present knowledge and means of investigation.

Concussion or vibration of the brain should not be considered a condition of disease of the brain, but merely a case of laceration and contusion of the organ.

Let the term concussion, as usually employed, be dropped and contusion or laceration substituted, and such symptoms as those I have been describing will be better understood and better treated. The three stages of concussion called the stage of collapse, that of reaction, and that of inflammation, are relics of the old nomenclatures, and are unnecessary. If concussion is synonymous with contusion or laceration, as it should be, the occurrence of reactionary and inflammatory phenomena is readily intelligible.

I wish to report three interesting cases which occurred in my practice, all differing in some respects:

On Jan. 16th, John K., a boy 15 years of age, jumped off the rear end of No. 18, Hot Springs Special, running at 50 miles an hour, alighted on feet, turned summersault, finally striking on head, causing slight contusion on nose, forehead and top of head. Was brought to depot placed on cot and when I saw him he was unconscious, vomiting, labored breathing, pulse very weak and pupils dilated. He was taken to hotel and remained in about the same condition for 48 hours. He could finally be aroused but would return to a sleeping stupor; would take water or a little nourishment; did not know any one or how he came by his injury. It was about ten days before his memory began to return. He seemed to know things that happened at the time but the past was a total blank to him. His pupils were slightly dilated; pulse full and hard, gait unsteady and halting. It is now four months since accident occurred and he has about recovered.

Case 2. S. D., boy aged fourteen, stout and very athletic, while playing catch-ball with his schoolmates, was struck on temple, or about midway between right ear and eye. The ball was made of twine wound on a walnut. The walnut weighed $\frac{1}{2}$ ounce. I think the ball altogether would not have weighed more than $1\frac{1}{2}$ ounces. It was thrown a distance of from twelve to fifteen feet. It did not knock him down. He walked home, $1\frac{1}{2}$ miles, and was helping his father when he lay down on ground and went to sleep. He could be aroused and was conscious; did not complain of any pain; pupil on right side dilated; pulse fair, very little swelling and no tenderness or sign of fractured bone at sight of injury. He remained in about this condition for forty-eight hours then became very nervous, especially lower part of body and limbs. Could not be held on bed; pupil in left eye became dilated; pulse 180; temperature, 101 degrees; could be aroused but would go back to sleep. At this time when turned on left side nervousness would disappear. Perspired very profusely. Finally on fourth day he died.

Case 3. This is not properly a case of concussion, but is very interesting, being an injury to the medulla oblongata. R. McG., age thirty-one was shot with No. 32 pistol ball; entered neck two inches below right ear; passed between atlas and occipital bone, through cord, up into foramen magnum, through medulla oblongata, lodged in petrous portion of temporal bone of left side; was injured on Sept. 3rd, 6 p. m. When I saw him pulse was slow, scarcely perceptible; breathing slow and labored; pupils slightly dilated; was aroused with difficulty; remained in this condition about thirty-six hours; lower limbs became partly paralyzed, and on the morning of the fifth he died.

MEDICAL ETHICS.*

BY O. B. HALL, M. D., WARRENSBURG, MO.

It might seem that after being sixty years before the minds of such a well established profession, the code of ethics, as adopted by the American Medical Association, might be laid on the top shelf of our libraries to be thought of only when some mooted or intricate question was to be disposed of. But whether it be due to the fallibility of the mind or the selfishness and greed of the animal within us, like the pages of holy writ and the statutory laws of our land, it must ever be spread open for our frequent perusal.

It is well that we have some criterion in every hope and aspiration in life. To anchor our ambition to the stars and our souls in eternity may seem to some like worthless dreams, and yet, this world would be but an image of what it is, were it not for the dreamers and idealists.

The medical profession should be proud of the man who, one century ago, wrote the code which schools the morals and general behavior of the medical world of to-day. Without these grand principles to form a working basis for improvement, the profession of medicine as applied to the healing art would be but a business, commercially utilizing mystery, deception and intrigue.

Much that is beautiful and conducive to the highest and most splendid traits of human character, and to the development and success of the best known type of civilization would be utterly banished from existence, if the standard of morals now upheld by the mighty phalanx of practicing physicians, throughout the length and breadth of this universe was lost from our view.

It is indeed sad to know that a few of our number cannot indulge in any higher thoughts and practices than those which ultimately jeopardize the interests of their own profession, for the sake of accumulating a little wealth, easily and quickly.

Too often do we find men who seek short cuts to comfort and notoriety. Wrongly judging the hard-working and scrupulous physician to make money, the young man is deluded and ogled into the desire to be a "doctor." Not being imbued with the real desire wrought by natural adoption and instinct to study medicine and its allied subjects for the love of the knowledge and the eminence incident to much sacrifice and long years of toil and study, the medical college is entered as soon as the requirements for admission can be complied with. With the single determination to be graduated, the real object of the four years study is lost, and the young man, with a degree much too large for himself, starts into practice with the idea

*Read before the Johnson County Medical Society, September 17th,

that soon his coffers will be filled to over-flowing, and that the old doctors will all be consigned to empty shelves. He gradually learns his mistake, and, not being acquainted with the hardships of competition or sacrifice which should have been learned during or prior to college days, resorts to the many disreputable make-shifts to provide for his own wants and those of his family. Being unable to honestly compete with his fellows, he continues his career as a mountebank and charlatan.

There is another class of men in this work who are able and intelligent, but who direct all their energy to obtain money from the public in any way which best suits their individual fancy. The writer would not hesitate to class all such as moral perverts to be rigidly supervised by lawful authorities.

The extreme freedom with which a man is graced in this country makes possible almost all kinds of graft and trickery, hence it is only through the combined efforts of good and intelligent medical men, that professional ethics and an inspiration to seek christian methods in medical practice, is unfurled as a banner for our guidance and protection.

Much is left to the discretion of every practician. No written laws can ever be applied to master intellectual man. Except as the principles of right and wrong are indelibly stamped upon the mind and conscience, little can be accomplished by the establishing of ethical standards.

Almost every day the doctor's mind and conscience are disturbed by outside solicitation and inducement. Often is he tempted to swing open the doors to bad morals and questionable devices, and obtain seeming advantage and prosperity. Frequently does the honest physician refuse to produce abortion upon some member of his clientele and lose a goodly fee, when he knows that she will fall into the clutches of some ignorant rascal who will do the job and get the money, with the final results that the woman fails in health and perhaps gives her life, because of the ignorance or carelessness of the man who pretended to do the work. Whether to adhere to the code strictly and be haunted by the pleadings of some misguided and unfortunate woman, or indulge in the performance of a criminal act and sustain the prickings of a sensitive conscience, is probably an unsolved problem in the mind of many a physician.

It is not always easy to determine what constitutes the best ethics in consultation practice. What may seem right to one, may appear wrong to another. I cannot conceive of a more opportune time to disable a fellow practician than when called in consultation with him. Neither can there be a time when a greater wrong may be done a patient who expects to be dealt with honorably, and hopes to be benefited by employing a physician in consultation. The proper adjustment of the relationship which exists between both physicians and the pa-

tient, and between the physicians themselves, not only to comply with the ethical standards, but to render honest and painstaking service to the sick, is a matter which cannot be considered lightly. It is no less than an art to meet a fellow-worker in consultation, and give satisfaction to the attending physician, and at the same time, meet the demands of a curious and interrogating public. Professional dignity and independence are qualifications which must be possessed in no small degree. It is imperative that the attending physician receive all the assistance which the one consulted can possibly bestow, and in such a manner that no offense will be taken or have reason for any.

One of the practices among medical men, which, in the writer's judgment, is paramount to commercialism in lowering the standard of the medical profession, in the minds of the general public, is selling professional knowledge or labor for a given period of time, for a stipulated compensation, i. e., contract practice, agreeing to practice medicine and surgery for a company, organization or corporation, for previously arranged fees. It is so common among us that to say aught against it is to oppose some one. But progress is made only through conflict, and the writer feels quite certain that a powerful opposition has already inaugurated itself against contract practice, wherever and in whatever form it is practiced.

The potential factor in introducing such practice is cheapness of labor. It is known by all institutions, that by procuring the written promise in advance much money will be saved in doctor bills. The reason such contracts are accepted is the certainty of a steady income. Perhaps in mining institutions and corporations of considerable magnitude, where the physician is employed by the company direct and paid an adequate compensation, it may be considered legitimate and ethical to enter into an agreement to give time and labor for a stipulated, momentary consideration. Granting the possibilities and benefits claimed for such contracts, the writer can, in no wise, hold the same liberal views toward contracts with smaller concerns for the sake of a few dollars per year, or influence gained by the associations or the reputation of being a good fellow. The farmer sells his produce, the merchant his wares and the laborer his time for what it will bring in the open market, which is always subject to the fluctuations of commercial interests and values. Is it possible that the medical profession should subject its practice to the bantering and trade instincts of the huckster or rattled off to the highest bidder, or even sold for a consideration adjudged competent by two contracting parties? If anything can act as a menace to professional dignity, it is bantering over the price to be charged for professional services. If any society, organization or corporation wishes the services of any special physician, let it compensate according to the regularly established fee bill of the community.

There is another practice among medical men, which is not cor-

ducive to the progress of medical practice. It is using influence external to those acquired by actual practice of medicine, such as society, church relationship, lodges, politics, business organizations, etc. Nothing, in fact, but the real ability to heal and prevent disease, should be utilized to advance personal interests in the practice of medicine, and even then, the ego should be forgotten in the burning desire to save and protect human beings from the ravages of disease and the sins which doth so easily beset members of our own race. To do good unto others, and thereby crown ourselves with glory, is the only motto which is naturally calculated to lift men to higher planes of development.

It has been agreed by some, that the rich should pay the bills of the poor, or, at least, should pay enough more than the poor, to equalize the income of the physician from labor expended among the various classes of people. Without going into the reasons why some people are more financially competent than others, and therefore held to be proportionately responsible, it seems but just to the well-to-do, in recognition of abilities, hard work and economy, that fees for certain grades of work should be universal, and if the deserving poor, (and I believe there are such) are unable to pay the full bill, let them pay what they can, and get a receipt in full. The longer the writer practices medicine, the less he believes in cut-rate prices. The rating of the fee-bill should be high, and maintained thus: The physician should get his money whenever possible, and when not, he should donate the balance to poverty,—and so let it be understood. For the more difficult and intricate surgical work and practice of an extraordinary character, special arrangements should be made, and the fees regulated accordingly.

At times, it seems but right to charge a smaller fee, when called in to see a patient while passing the house or waiting upon a near neighbor, but experience has proven that it is better to charge the regulation fees at all times and under all circumstances. It is not only more convenient to the patient to call a physician from the street or have him living next door, and therefore worth more, but the inconvenience to the physician, and the undue liberties often taken of the physician's time, under such circumstances, are sufficient to justify charging the regular fees for such services. Then again, it is but just to the other members of the profession, to adhere as closely as possible to the fee-bill. The ultimatum of ethics in medical practice is the protection of the rights of one another.

In conclusion let us assert that, while it is the God-placed duty of every physician to protect and improve his own interests on the practical side of life, it is far more important that he cultivate and develop the ability to diagnose and treat disease, and become more acute to the finer and more delicate perceptions of instinct and mentality, all to the end that brother-practicians be courteously protected in their rights, and that the general public be given the products of a fertile and ethical profession. Quality alone can win, and the fittest will survive.

REPORT OF A CASE OF INFANTILE PARALYSIS.*

BY GEO. M. MOORE, M. D., LINN CREEK, MO.

The patient we have before us to-day is of great interest to us all. About four weeks ago this little fellow was stricken with infantile paralysis. These cases are usually seen between the ages of six months and seven years. This little boy is seven years old and has had good health all his life; if you will look at him you will see he is well grown for a boy of his age; he seems well yet. I will give in brief the history of this case.

Some four weeks ago this patient went to bed in his usual health; next morning he was paralyzed in both legs, could not use them to any degree; could only drag them in the bed or on the floor. This seems to be the usual history of these cases. One point of interest is that the paralysis is at its maximum in the commencement, so with this bit of history we can say to the father that his boy is as bad as he will get to be. We have it from such men as J. Lewis Smith, Holt and others that the rule is that these little patients continue to improve to a certain degree of recovery. Another point of interest is that the bladder and the bowels remain unaffected, since only the muscles of volition are involved. The fever that usually is present in the beginning of these cases is wanting, as we have no history of any fever in this case. This might have been overlooked as this fever is usually of short duration—from two to three days.

Etiology: The most common lesions in these cases are the inflammation of the anterior cornua of the spinal cord. But the case we have before us must be of a different cause inasmuch as the paralysis came on too suddenly. We then will have to look for another cause; it is possible we have to deal with a sudden exposure to wet or to wind or from sleeping in too damp or too cold a place.

Diagnosis: This is usually easy, for the paralysis is present and the history of the case ordinarily unmistakable.

Prognosis: It may be confidently predicted, if the child be seen early and correctly treated, that the paralysis will soon diminish, if it cannot entirely be cured. But on the other hand if we treat a case of this kind and do not get results soon, we then expect some more serious trouble, for at this point we have the wasting of the muscles, and the tissue waste is great; the appetite is poor and the patient is usually run down, and it is hard to start improvement. But most of these patients begin to improve early.

The treatment of these cases is simple, but must be right. We should at the commencement of our treatment prevent if possible the exciting causes; we should see to it that the patient's nervous system

*Read before the Camden County Medical Society, June, 1906.

is protected; he should not be let have his way to run in the rain or snow or bad weather of any kind; he should have good food, easy of digestion, should drink plenty of sweet milk and eat at regular meal times; the bowels should be kept open.

Local treatment is very useful at all periods of the paralysis; some stimulating liniment should be used over the spine and over the limbs. For internal administration ergot, bromide of potassium, bromide of ammonia, at first, are the very best agents to be used for they lessen the congestion of the spinal cord. If after two or three weeks we do not have some marked improvement, we should change our treatment to something like this:

Strych. sulphat.	gr. i.
Ferri pyrophosphat.	grs. xxx.
Acidi. phosphorici, dil.	dr. ss.
Syr. zingib.	oz. ii ss.

Misce et Sig. Fifteen drops in water three times daily to a child of two years.

The limbs should be bathed in hot water for some twenty-five minutes, and then rubbed well for some minutes, to cause considerable stimulus to the parts; after the bath and the rubbing, the liniment should be used freely until the skin is quite red; the bath of the legs should be given about every other day but the liniment should be applied every day. If we see these little patients early in their sickness, we should give a brisk laxative and a fever mixture, if the fever is high enough to warrant such action. These little patients should remain in bed and the affected limb or limbs wrapped in cotton. But the time for this treatment is usually past before the physician is called. Blistering and other counter-irritation to the back, I consider irrational and cruel to the child and should never be used.

The care of the child is important. The general nutrition should be carefully maintained by proper feeding and by taking it out of doors every day. As soon as the child can bear friction the part should be carefully rubbed, at first once a day. The muscles should be rubbed and kneaded, even pinched, using either the bare hands or, better still, sweet oil or cod-liver oil; this is worth a great deal, for it stimulates the muscles. I informed the father at his visit at my office that complete recovery could not be expected, but I thought I would soon be able to do his child some good, and the child seems improved to some degree. We might say, in passing, that we might have deformities in these cases. It is always better to tell the parents about this for they might think it was due to the treatment. There is no other disease in which the physician is more often subjected to unjust criticism and we should mention these points of interest so that the parent will not be mistaken about the results.

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EDITORIAL.

LIFE INSURANCE EXAMINATION FEES.

The decided stand taken by the organized profession throughout the country in the matter of fees for life insurance examinations, has resulted in the complete vindication of the attitude of the profession. The majority of those insurance companies which reduced the fees from five dollars to three dollars have been forced to restore the five dollar fee. The restoration of the five dollar fee is a tacit acknowledgment on the part of the companies that the position taken by the profession was correct, but, far from openly acknowledging this, some of the companies offered most puerile and transparent reasons for acceding to the righteous demands of the profession. We know, however, that the victory was obtained only through the general and united action of the profession, and a firm adherence to the position assumed.

Viewed at first with scorn and derision, it soon became apparent to the companies that their business life depended upon the co-operation of the good element in the medical profession. In every community, when the companies sought new examiners among capable physicians at the smaller fee, they found the great majority of reputable practitioners firm in refusing to make examinations for less than five dollars; moreover, they knew it would be suicidal to accept examinations from incompetent and irresponsible persons. And, finally, these corporations realized that the respectable physician placed a certain valuation upon his services and was not to be hired as a day laborer might be.

In the light of these developments, which could not have been accomplished without state organization, the time is opportune to bring the matter of state organization, in all its bearings, before those reputable members of the profession who are still outside its beneficent pale. These should be informed of what has been accomplished

through state and national organizations. The insurance companies never would have rescinded their action in answer to half-hearted protests from scattered members of the profession. Again, we never could have secured the passage of the medical practice act, which has placed Missouri on the same plane with other states owning rigid laws governing the practice of medicine; never, indeed, could the medical profession have raised its standard higher than the estimation in which it was held by people outside the profession, through any other means than those of compact, and of thorough, harmonious and determined organization.

Every member of the medical profession in the state is benefited by the work that is being done by our organization: and those eligible physicians who are not members of county societies pursue a selfish course in remaining outside the local body. They are depriving themselves of much practical and useful information and selfishly reserving much knowledge gained in their own work, by refusing to meet with their fellow practitioners, for the purpose of studying the problems arising in every phase of medical life. They are further guilty of selfishness in withholding their active support to the organized profession in their communities when efforts are put forth to accomplish worthy objects, unattainable through any other means.

We should like to see every reputable physician in each county a member of the local society. Through unity of purpose enough has been done to prove the effectiveness of organization to those doubters who have held back, in the belief that individual effort could accomplish all that was needed or desired; and now they should be approached again with an invitation to join and a statement of what has been done and what can be done by the united efforts of all worthy practitioners.

NEW MEMBERS TO BE EXEMPT FROM DUES FROM OCTOBER TO DECEMBER.

The Executive Committee announces that a resolution has been adopted requesting all affiliated county societies to accept dues from new members received from October 1st to December 31st, in payment of dues from the time of admission to December 31st, 1908.

COUNTY SOCIETY SECRETARIES' ASSOCIATION.

The officers of the Association, charged with the organization of the profession, have under consideration the calling of a meeting of the secretaries of the component county societies, during December or January, for the purpose of discussing means of securing a permanent organization of the county society secretaries.

One of the most important branches of state medical organization work is the formation of county society secretaries' associations. The

county society secretaries of Pennsylvania and of Ohio have organized such bodies, with the result that interest in the work of the county secretary has greatly increased. The work of the county society secretary is of the highest importance in furthering the effectiveness of the state organization. Viewed from any standpoint, the organization of the county society secretaries can have only a beneficial effect upon the work of the entire State Association. We earnestly hope the meeting will result in the permanent organization of the county secretaries.

On another page we publish several letters from county society secretaries, all endorsing the idea.

The annual meeting of the Medical Society of the State of Pennsylvania was held at Reading, September 23-26. The Association has a membership of 4,826, a gain of 229 over 1906. There were 546 members in attendance.

One of the features of the meeting was the conference of secretaries of county societies. A number of papers were read, each dealing with some phase of the multifarious duties of the secretary, and, in addition, addresses were delivered by other members of the Association. Dr. Geo. H. Simmons, Secretary of the American Medical Association, was a guest of the Association and addressed the secretaries' conference. The temporary organization formed in 1906 was made permanent.

The Ohio State Medical Association Annual Meeting occurred at Cedar Springs, August 28-30. Resolutions were adopted disapproving the attitude of Senator Foraker and other members of Congress from Ohio with reference to the National Pure Food and Drug Bill, and a vote of thanks was tendered other members for supporting and voting for the passage of the Bill.

A resolution was adopted urging the committee on public policy and legislation to work to the end of having all appointments of medical officers in the state made from nominations submitted by the state and county medical societies. The funds of the Association not permitting an appropriation to this committee, a resolution carried requesting each county society to contribute fifty cent per capita, the sum to be collected from individual members if necessary. The Association has a membership of 3,615, and 546 members were present at the annual meeting.

The county secretaries' association held its second annual meeting during the session and effected permanent organization. The work of the secretaries' association was reviewed and discussed and permanent organization was heartily endorsed.

NEW AND NON-OFFICIAL REMEDIES.

The following articles have been accepted by the Council on Pharmacy and Chemistry since last report:

APIOL.

APIOLUM CRYSTALLISATUM. PARSLEY CAMPHOR.

Apiol may be obtained by extracting the oleoresin (oleoresin of parsley seed, which see) with ether and subsequent purification. It may also be obtained by submitting parsley seed to steam distillation, cooling the volatile oil and collecting and purifying the crystals which separate.

Apiol crystallizes in long needles, having a faint odor of parsley, melting at 30 C. (86 F.) and boiling at 294 C. (561.2 F.). It is insoluble in water, but readily soluble in alcohol and ether. With strong sulphuric acid it forms a blood red solution. Apiol is not affected by aqueous solutions of potassium or sodium hydroxide, but by alcoholic solution of potassium or sodium hydroxide it is gradually converted to isoapiol, which melts at 56 C. (140 F.).

Actions and Uses.—Apiol is said to produce a cerebral excitation very similar to that induced by coffee and in larger doses a species of very similar to that induced by coffee and in larger does a species of intoxication, with vertigo, ringing in the ears and severe frontal headache.

Apiol has been used as an antiperiodic, but is regarded as of inferior rank for this purpose. It has also been recommended in the treatment of amenorrhea.

Dosage.—0.13 to 0.3 Gm. (2 to 5 grains) in capsules, as an emenagogue, 0.3 to 1 Gm. (4 to 15 grains) as an antipyretic.

CHOLOGESTIN.

A liquid of which each 15 Cc. (4 fluidrams) is said to contain the amorphous sodium salt of glycocholic acid, 0.13 Gm. (12 grains); true sodium salicylate from the natural oil of wintergreen, 0.16 Gm. (2½ grains); pancreatin, 0.3 Gm. (5 grains); sodium bicarbonate, 0.3 Gm. (5 grains) in a menstruum containing 15 per cent. alcohol.

Actions and Uses.—Chologestin is claimed to be a biliary and intestinal antiseptic. It is said to increase the flow of bile and to aid in the digestion of fats. It is said to be useful in the treatment of flatulence, distension, catarrhal conditions of the biliary passages and constipation due to hepatic torpor.

Dosage.—15 Cc. (4 fluidrams) in water or other non-acid vehicle three times a day after meals.

Prepared by F. H. Strong Co., New York. U. S. trademark No. 61767.

DIAZYME ESSENCE.

A liquid stated to contain the amylolytic enzyme of the pancreas, devoid of trypsin and lipase in a menstruum containing 18.5 per cent. of alcohol by volume.

Diazyme essence is an amber fluid of aromatic taste and odor and slightly acid reaction.

One Cc. will convert 200 Gm. of pure starch mucilage, containing 8 Gm. of dry starch, the mixture being kept at 40 C., so that the solution will cease to give a color reaction with iodine at the end of ten minutes.

Actions and Uses.—Diazyme is capable of digesting starch and is said to be useful to compensate for deficient salivary and pancreatic action in the digestion of starch.

Dosage.—4 to 8 Cc. (1 to 2 fluidrams):

Manufactured by Fairchild Bros. & Foster, New York. U. S. trademark No. 44878.

DIAZYME GLYCEROLE.

A liquid stated to contain the amylolytic enzyme of the pancreas, devoid of trypsin and lipase, in a menstruum containing about 60 per cent. of of glycerin by volume.

It is a dense amber fluid, of agreeable taste and odor, and of slightly acid reaction.

One Cc. will convert, at 40 c., 200 Gm. of pure starch mucilage, containing 8 Gm. dry starch, so that the solution will cease to give a color reaction with iodine in 10 minutes.

Actions, Uses and Dosage.—See Diazyme Essence.

Manufactured by Fairchild Bros. & Foster, New York. U. S. trademark No. 44878.

EMULSION CLOFTLIN.

Each 30 Cc. (1 fluidounce) is said to contain calcium hypophosphite, 0.4 Gm. (6 grains); manganese hypophosphite, 0.2 Gm. (3 grains); glycerin, 3 Cc. (50 minims); cod liver oil, 15 Cc. (4 fluidrams).

Dosage.—15 Cc. (4 fluidrams).

Prepared by the Cloftlin Chemical Co., New York.

OLEORESIN OF PARSLEY SEED.

OLEORESIN APIOL. APIOL, GREEN.

An oleoresin obtained from parsley seed by extraction with alcohol.

Parsley seed is extracted with alcohol, the alcohol recovered, and the liquid portion of the residue freed from the solid waxy matter/which separates on standing.

Oleoresin of parsley seed is a greenish, oily liquid, insoluble in water, but soluble in alcohol, ether, and chloroform. Sp. gr. about 1.05.

Actions and Uses.—See Apiol.

Dosage.—0.3 to 1 Cc. (5 to 15 minims) in capsules.

REGULIN.

A mixture of agar-agar in a dry form with extract of cascara sagrada representing 20 per cent. of an aqueous fluidextract of cascara sagrada.

Regulin is in the form of brown scales which slowly absorb water to form a jelly. It is odorless and tasteless.

Actions and Uses.—When taken into the stomach, regulin absorbs water which is said to be retained throughout the intestinal canal, and, as the material is indigestible, the bulk of the feces is increased to correspond to the amount of water absorbed. It is non-irritating and softens the fecal masses. Some laxative action is exerted by the *cas-cara sagrada*.

Regulin is recommended for the treatment of habitual constipation.

Dosage.—From a teaspoonful to a tablespoonful once daily in stewed apples, mashed potatoes or similar food

Prepared by the Chemische Fabrik, Helfenberg, A. G., near Dresden, Germany. (Reinschild Chemical Co., New York.)

TANPHENYFORM.

Tanphenyform is a mixture said to be composed of tannin albuminate 63.9 parts (approximately equivalent to tannin 35 parts), hexamethylenamine 8.3 parts, phenyl salicylate (salol) 27.8 parts.

Dosage.—0.6 to 2 Gm. (10 to 30 grains) 3 to 5 times a day. It is supplied in the form of a powder and also in 5 and 10 grain capsules.

Prepared by Wm. R. Warner & Co., Philadelphia.

CORRESPONDENCE.

CONCERNING THE MEETING OF COUNTY SECRETARIES.

"The idea is a good one and I will do all I can to make the meeting a success. We need something to stir us up.

E. N. CHASTAIN,

Secretary, Bates County Medical Society.

"I think the idea of calling a meeting of the secretaries and councillors is a good one. We certainly need a more united action and a better understanding as to what we want. I shall be glad to co-operate in making the meeting a success."

S. L. BAYSINGER,

Secretary, Phelps County Medical Society.

"I am of the opinion that a meeting of the secretaries and councillors of the various districts would result in benefit to the profession. I am willing at any time to aid in promoting medical organization, as I am sure that is the best means to increase the influence of the profession and to secure good legislation and scientific work.

W. R. PATTERSON,

Secretary, Moniteau County Medical Society.

"I think there is no doubt but what we could get a good attendance of the councillors and the secretaries, should the meeting be called, for these officers are the life of the local societies. I will try and attend and do all I can to create an interest."

W. G. JONES,

Secretary, Benton County Medical Society.

To the Members of the State Medical Association:

Inasmuch as the State Medical Association is largely composed of members living in the smaller towns of the state, and that many valuable jewels lie hidden in the untold experiences of hundreds of these rural doctors, only awaiting an invited opportunity to reveal their luster, I, as chairman of the medical section, as a member of the committee on the scientific program, and also by the request of our worthy President, Dr. W. S. Allee, extend a special invitation to you who are in the rural and remote regions of the State to join with those who have given their time and support so freely in the past towards promoting the interest of the Association. We kindly solicit papers from those who have never heretofore taken an active interest in the Association, who have an abundance of interesting items never before related by any one. The bulk of membership of the State Association is composed largely of country doctors of wide experience and this class of physicians are more in evidence at the annual meetings.

I appeal to the presidents of county societies to have one or more of their members write papers to be read at the next meeting of the State Association, to be held at Springfield in May. Have the essayists forward title of the subject at an early date, either to Dr. H. S. Pearse, Kansas City; Paul Y. Tupper, St. Louis; Gail D. Allee, Lamar; or myself at Butler, and we will see to having their names appear on the program. I wish to state, however, that if more than enough papers to complete the program are sent in we will be compelled either to leave them out or make some arrangement to have the overplus read by title, that they may enter into the proceedings of the meeting and be published later in the *State Journal*.

Please send in title early, which will afford you a better opportunity of having a favorable space on the program.

T. F. LOCKWOOD, M. D.,

Chairman of the Medical Section.

To the Secretaries of the County Medical Societies:

At a meeting of the Committee on Public Policy and Legislation held in Nevada, October 3, 1907, a number of matters of interest to the profession were discussed and it was decided to ask you to take up some of them with your respective societies and, after getting an expression of their wishes, to communicate the same to the Secretary of our State Society, Dr. A. W. McAlester, of Kansas City. We therefore call your attention to the report of this meeting, published below, and ask that you read this at the next meeting of your society; that you discuss these points and others; then let the committee have the benefit of your deliberations.

Hoping you will receive this through our *State Journal* and treat it as a personal communication, we respectfully await your action.

C. E. FULTON,

H. E. PEARSE,

G. C. WILSON,

Committee.

**MINUTES OF THE MEETING OF THE COMMITTEE ON
PUBLIC HEALTH AND LEGISLATION, HELD AT
NEVADA, OCTOBER 3, 1907.**

Meeting called by the chairman of the Committee; those present: Dr. W. S. Allee, Olean; Dr. C. E. Fulton, Springfield; Dr. G. C. Wilson, Nevada; Dr. H. E. Pearse, Kansas City; Dr. A. W. McAlester, Jr., Kansas City. Dr. DeVilbiss, at the request of the committee, attended the meeting and aided the committee in formulating its work.

Dr. Ruby, of the State Board of Dental Examiners was also present and spoke on the subject of "Corporations Practicing Medicine and Dentistry." Dr. Ruby advocated a law prohibiting cor-

porations from practicing medicine and dentistry, holding that authority to practice both professions should come under the jurisdiction of their respective boards and not from a charter from the Secretary of State. Dr. McAlester called attention to a decision of Justice Marshall that corporations could not practice medicine and surgery, a license from the State Board of Health being necessary therefor.

The committee instructed the secretary to communicate with Justice Marshall in regard to this point and report at the next meeting.

Dr. Pearse spoke of the excellent work done by the committee during the past year, and paid a tribute to the work of Dr. DeVilbiss and Dr. Lutz for their assistance to the committee during the last session of the Legislature; he further spoke of the excellent work now being done by the St. Louis Medical Society and the Jackson County Medical Society in ridding their respective cities of illegal practitioners.

It was ordered by the committee that the secretary be instructed to get recommendations from the attorneys of Jackson County Medical Society and from the attorney of the St. Louis Medical Society as to the changes necessary in the court review clause of the present act, that in case of revocation of license to practice a speedy trial may be obtained, and the decision of the State Board of Health obtain until reviewed by the courts.

After considering several measures that were presented, the Committee decided to take up the following measures and to present them to the County Societies, and to the State Association at its next meeting at Springfield, that all may have an opportunity to discuss the recommendations and determine what is best. Accordingly, the secretary was instructed to submit to the County Societies the following points for discussion at their meetings, with a request that they communicate to him their views, to be presented to the committee so they may be better able to carry out the wishes of the entire profession and formulate an acceptable report for the next annual meeting:

1. The modification of the appeal clause as mentioned above.
2. An act to prohibit corporations from practising medicine and dentistry.
3. The establishment of the State Board of Health on a permanent basis as a police board with ample funds and laboratories to carry out all investigations and supervision of the public health, to enforce the Pure Food and Drug Law, care for the water supply of the state and supervise all matters of quarantine, to promulgate and enforce regulations for the collection and registration of the vital statistics, quarantine regulations and all matters within the province of police power. The committee realizes that the public outside of the larger cities has now no protection from epidemics, adulterated foods, contamination of water supply, etc. It should be the office of the State Board of Health to enforce the provisions of the act relative to these. The Board of Health to license on the recommendation of the Exam-

ining Board and to have the power to revoke license as now provided by law. The examination of candidates to practice medicine, which is an academic matter, to be done by a special Board of Examiners in conformance with the plan of other states.

4. That the statute of limitation under which a suit for malpractice can be instituted be limited to one or two years. (It is five under the present law.)

The secretary was instructed to take up these points with the President of the State Board of Health; and to take up the advisability of establishing a uniform law for each state with the Committee on Medical Legislation of the American Medical Association and ask that committee to draft such a law; the purpose being for nation wide reciprocity.

A. W. McALESTER, JR., M. D., Secretary.

Editor Journal Missouri State Medical Association:

At the recent Annual Meeting of the American Pharmaceutical Association the undersigned was directed to send you a copy of the following resolutions:

WHEREAS: The American Medical Association, the American Pharmaceutical Association and the National Association of Retail Druggists together with many State and local organizations and journals in both professions have been for some years endeavoring to bring about a return to the practice of medicine based on the Pharmacopoeia, and

WHEREAS: The medical colleges are represented on the Committee of Revision of the U. S. Pharmacopoeia, and

WHEREAS: It is manifest to the thoughtful men both in medicine and pharmacy that a very large number of medical men might be better informed regarding the Pharmacopoeia as a book of reference and standards. Be it therefore

Resolved: That it is the sense of the American Pharmaceutical Association in convention assembled, that a great advance in the ethical practice of medicine and pharmacy will be made when the medical colleges make the Pharmacopoeia a prescribed text-book or book of reference and require a familiarity with it in their examinations.

Resolved: That we request the governing authorities of all medical colleges in the United States to put into force such a ruling in their respective institutions as will insure in future classes a well grounded knowledge of materia medica and Pharmacognosy, as set forth in the Pharmacopoeia.

Resolved: That the General Secretary be directed to transmit a copy of these resolutions to each medical college in the United States and to the medical and pharmaceutical press.

Yours very truly,

CHAS. CASPARI, JR., General Secretary.

COUNTY SOCIETY NOTES

ATCHISON COUNTY MEDICAL SOCIETY.

The Atchison County Medical Society met at Fairfax, on October 8th.

Dr. J. A. Hunter read a paper on "Anesthetics and Anaesthesia", and led in the discussion of these subjects. The other members participated in the discussion and many useful and interesting facts were presented.

The Society also discussed new remedies. This feature of the meeting was also of great interest, and, in short, the meeting was regarded as one of the best ever held by the Society.

Those present were: Dr. W. B. Lott, Westboro; Dr. A. McMichael, Rockport; Dr. J. A. Postlewait, Tarkio; Dr. J. S. D. Abbott, Dotham; Dr. E. P. Taylor and Drs. J. A. and O. A. Hunter, Fairfax.

Officers for the ensuing year were elected as follows: Dr. E. A. Lewis, president; Dr. C. M. Waugh, vice-president; Dr. A. McMichael, secretary; Dr. J. A. Hunter, treasurer.—AUSTIN McMICAL, M. D., Secretary.

BENTON COUNTY MEDICAL SOCIETY.

The Benton County Medical Society met in annual session at Warsaw, October 22nd, with the following members present: Drs. S. A. Davis, R. L. Pomeroy, H. G. Savage, Warsaw; M. Dillon, Fairfield; A. C. Curl, Cross Timbers; N. A. Schwald and M. L. Sands, Cole Camp; E. L. Rhodes and W. G. Jones, Lincoln.

Officers for the ensuing year were elected as follows: President, E. L. Rhodes; Vice-President, A. C. Curl; Secretary-treasurer, W. G. Jones; Delegate, N. A. Schwald.

Dr. M. L. Sands read a very instructive paper on "Physiology: The Basis of Diagnosis and Treatment."

Dr. R. L. Pomeroy read an interesting paper on "Massage: Its Use and Abuse."

Both papers were highly appreciated and thoroughly discussed by each one present.

Society adjourned to meet in Warsaw on the 2nd Tuesday in January.—W. G. JONES, M. D., Secretary.

THE CAPE GIRARDEAU MEDICAL SOCIETY.

The Cape Girardeau County Medical Society held its regular monthly meeting at Cape Girardeau, October 4th.

The Insurance Committee made its report which was adopted unanimously. It was shown that most of the insurance companies are

coming to the minimum fee of \$5.00. It was also shown that the companies paying the largest dividends to the policy holders were the \$5.00 companies. This included the oldest companies in existence.

The By-Laws were amended to conform to the wishes of the American Medical Association by collecting dues early so that the Secretary can make his annual report and the Association know who are members.

The program for the evening, consisted of a symposium on

NEPHRITIS.

Etiology and Symptoms.....	Dr. Rosenthal
Morbid Anatomy	Dr. Porterfield
Clinical Microscopical and Differential Diagnosis.....	Dr. Wilson
Treatment	Dr. Cunningham

After a profitable discussion of the papers the Society adjourned.

—E. H. G. WILSON, M. D., Secretary.

GREENE COUNTY MEDICAL SOCIETY.

MEETING OF SEPTEMBER 27.

The committee on "Open Session Meeting" reported everything in readiness for the meeting on October 4.

On motion the Society decided that \$2.00 was a small enough fee to charge for a Fraternal Life Insurance Examination.

The subject for discussion was "Diseases of the Throat." Dr. Coffelt opened the discussion and gave an interesting description of and the treatment for acute tonsillitis. Drs. Farnsworth, Fortner and Terry took part in the discussion.

OPEN SESSION MEETING OF OCTOBER 4.

The Society met in the Auditorium of the High School. Prayer by Rev. Bacon. The Secretary read the program as follows:

Paper, "Public Hygiene," by Professor Carrington. Discussed by Dr. Nixon, Dr. Ralston, Prof. Roberts and Prof. Dodd.

Paper, "Public Sanitation," by Dr. Wm. Smith. Discussed by Dr. Terry, Dr. Fortner, Judge F. B. Williams, Judge Howell, T. R. Gibson and Hon. S. C. Hazeltine.

The President made a short introductory address and said the object of this meeting was to benefit the public and to awaken a greater interest in matters pertaining to the public health. The advancement of the medical profession in the line of preventive medicine has been very great in the last few years and it is becoming time that the educators and thinking people should know that in many instances, by proper sanitary and hygienic measures, much sickness and suffering can be avoided, and this Society is willing to assist in matters to improve the public health.

Professor Carrington said the schools develop children intellectu-

ally, morally and physically. We should have a system of physical inspection of the scholars and a department of hygiene in our Normal Schools; there should be a Superintendent to oversee the physical health and training of the child.

Dr. Nixon said the responsibility rests with the teachers and they should be educated in this line.

Dr. Ralston spoke of the unsanitary condition of the drinking water at some schools.

Professor Roberts was pleased to see the physicians interested in this line.

Professor Dodd said better sanitary conditions could not be had until there was more school money and the public realized the necessity for such things.

Dr. Wm. M. Smith read a carefully prepared paper on Public Sanitation. He spoke of regard for health in antiquity, in provisions of the Mosaic code; regard for sanitation goes with enlightenment. A resume of his remarks follows:

Sources of pollution exist in air, water and food. The air carries germs of disease, gases from sewage and infection from garbage and excreta; cesspools were strongly condemned and should not be allowed to exist. Dust irritates the passages in the nose and throat, and contains germs of disease.

Water may be unhealthful. Wells and springs in the city cannot be free from infection. Care should be exercised in locating cemeteries. Running water will not wholly purify itself. Filters are often faulty and imperfect.

Food has dangers that call for national law. Milk may convey tuberculosis, a disease more dangerous than diphtheria. Curable cases should be placed in proper places and incurables secluded.

In discussion, Dr. N. F. Terry spoke of the new science of bacteriology, and of the realm of ascertained facts it brings to us. Dr. B. F. Fortner, Superintendent of Frisco Hospital, spoke of the cost of ill health and of death, so far as care can prevent, estimating the amount for Springfield as little short of half a million dollars. Hon. F. B. Williams showed how completely the law provides for sanitation: Judge H. E. Howell declared sanitation one of the objects in view in the appointment of the Committee of One Hundred. Thomas R. Gibson would have agitation on the subject; S. A. Haseltine said the Ladies' Saturday Club began some years ago to shape sanitary legislation in an ordinance prohibiting expectoration on cars and on the streets.

MEETING OF OCTOBER 11.

The Committee on Library reported a revised set of Rules and Regulations and on motion this report was adopted.

Committee on Open Session Meeting reported that said meeting seemed to be very well received and had done much good and that the public would appreciate more of just such meetings.

Subject for discussion "Report of Cases." Dr. Camp reported a case of episcleritis which was discussed by Drs. Coffelt and Farnsworth.

Dr. Oldham reported a case of spasm in a young child which was followed by a seeming paralysis of one of the arms.

Dr. Smith reported a case of brow presentation which turned very quickly. Drs. Cox and Fulton discussed the case and all agreed that such cases were very uncommon.—J. L. ORMSBEE, M. D., Secretary.

HOWARD COUNTY MEDICAL SOCIETY.

The Howard County Medical Society met at Fayette, on October 4th. Those present were, Drs. P. C. Smith, N. E. Smith, A. W. Moore, V. Q. Bonham, J. B. Fleet, C. P. Magee, C. H. Lee, A. B. Burgin, T. C. Richards, C. W. Watts; visitor, Dr. J. S. Preston, of Armstrong.

Dr. Fleet, of New Franklin, reported a mild case of typhoid fever. Drs. Richards and Fleet reported two obstetrical cases very peculiar in symptoms and results, in which good results followed strict antiseptic treatment. Dr. Watts suggested that septic results in the past were often the result of neglect and carelessness on the part of the accoucher as well as the nurse and ignorant friends.

Dr. Watts presented a case of epiglottitis in a young man, the result of the use of cigarettes and alcoholics. The epiglottis was swollen to the thickness of the tongue. Treatment was by purgatives, alteratives and the use of bromides, iodine, adrenalin, etc. He said that unless the condition was relieved by the next meeting he intended to remove the upper section with the ecraseur. Such cases are rare and interesting, and dangerous as regards results.

Dr. C. H. Lee reported a case of gunshot wound of the head. A .32 caliber ball was shot into the mouth and lodged in the antrum or septum. Did not probe. Patient doing well. There is a difference of opinion among civil and military surgeons as to when we are justified in using the probe in these cases. Dr. Watts said he always went for the ball in soldiers during the war if there were no strong contraindications. Like pus, it did no harm outside but it might and probably would, even if encysted, inside.

The members of the Society for the Prevention of Tuberculosis were given until the November meeting to report organization to Dr. Porter.

A committee of five was appointed to regulate fees and report the names of those who never pay the doctor and get their practice free by changing doctors. Drs. Lee Bonham, P. C. Smith, Champion and Thompson composed the committee and will report at the next meeting.

Dr. A. W. Moore was given a letter of commendation to the New Mexico fraternity.—C. W. W., Reporter.

JACKSON COUNTY MEDICAL SOCIETY.

MEETING OF SEPTEMBER 24TH.

The regular weekly meeting was held in Employer's Association hall Tuesday evening September 24th. There were present thirty-five physicians.

Dr. Jno. W. McKee presented a case of macroglossia which was probably a lymphangioma. The young lady, 18 years of age, was perfectly healthy and in every other manner perfectly normal. The tongue was slightly enlarged at birth, but did not grow to any extent until she was three years old, when it protruded from the mouth and hung down to the extent of three inches, was one inch thick and about two and one-half inches wide. The lower jaw was undeveloped as a result of tongue pressure. The lower incisors were pushed out to a horizontal position; the tongue bore a heavy coating and was constantly drooling.

Dr. Herten. Robinson and others discussed the case with much interest. Aside from several interesting case reports the remainder of the evening was devoted to some very important business.

MEETING OF OCTOBER 8TH.

Dr. Ernest Robinson read a paper entitled "The Trypsin Treatment of Carcinoma." He had used this method of treatment on several cases, but without good results.

Dr. Brewster next read a paper entitled "The Bacterial Vaccine Treatment of Carcinoma." This treatment referred was the same as that carried out by Wright of London, in whose laboratory the doctor had spent several months as a student. This treatment consisted not in supplying the patient with any substance that would influence directly the neoplasm, but by administering vaccines of the different associate forms which thrive upon this pabulum of broken down tissue, especially micrococcus neoformis. It was possible to lessen the formation and hence absorption of toxin with a result that many times the patient obtained marked relief. In discussing this paper little was said as to the vaccine treatment, as no one present seemed to have had any personal experience with this method of treatment. Many however discussed the paper read by Dr. Robinson on the trypsin treatment, several having given it a fair trial and all quite agreed with the doctor that it was not a success.

In opening the discussion Dr. F. E. Wilhelm reported six cases of carcinoma and sarcoma in which he had given the treatment a fair test, absolutely with negative results. Others discussing this paper were: Drs. Hertzler, Pearse, Hal Foster, McCandless, and Trimble. All agreed that the essayist was correct in his statement when he pronounced the trypsin treatment of carcinoma a failure.

The meeting then passed into executive session and the following names voted upon and unanimously elected to membership: Dr. D.

A. Laurenzauna, Dr. Richard L. Sutton, Dr. Vernon Lee Andrews and Dr. H. E. Songer.

MEETING OF OCTOBER 15TH.

Meeting was held in Spauldings Auditorium. There were present sixty-five. This was a joint meeting with the Wyandotte County Medical Society of Kansas City, Kansas, Dr. T. C. Biddle, of the State Asylum, Topeka, Kansas, was also present.

The scientific program consisted of a paper read by Dr. S. Grover Burnett, entitled "The Disposition of Criminal Epileptics; Will Missouri Continue to Judicially Murder Them and Kansas to Sentence Them to Death: A Seven Year Study of Three Men Who Murdered Eleven People." The doctor's paper was extremely interesting and instructive and nothing short of a complete repetition would do it justice. Each epileptic had committed a murder at a time which to his mind without doubt remained a blank. Other epileptics reported had, during a similar condition of mind, wandered many miles and had done most peculiar things, and after becoming rational knew nothing of their actions during this period. His conclusions were that these patients should not be put to death or even be sent to the penitentiary, but should be confined in a suitable institution where treatment instead of punishment should be administered to them. He praised Kansas and other states in which the epileptic was no longer sentenced to death, but where a scientific treatment was administered instead; and criticised Missouri for not having taken the same step.

Dr. T. C. Biddle, Supt. Kansas State Asylum, Topeka, opened the discussion and quite agreed with the essayist in every respect. He mentioned the fact that epileptics are prone to moral degeneration and vicious crimes and should not be turned loose upon the public to commit crimes and beget offspring till at least many years of apparent cure had passed. Many others discussed the paper and especial interest was taken by our visiting friends from Wyandotte County.

After a few closing remarks by Dr. Burnett, Dr. A. H. Cordier arose and in behalf of the local members of the Mississippi Valley Medical Association presented the Jackson County Medical Society with an ivory gavel.

The chair then called the society into executive session.—E. L. STEWART, M. D., Secretary.

NODAWAY COUNTY MEDICAL SOCIETY.

The regular monthly meeting of the Nodaway County Medical Society was held at Maryville, October 8th. The following members were present: Drs. F. R. Anthony, L. E. Dean, E. L. Crowson, J. W. Dean, C. F. Howell, J. A. Larrahu, H. L. Sayler, H. C. Goodson, A. B. Allen.

The scientific program consisted of the following:

- (1) Malarial Fever, with report of cases. By Dr. L. E. Dean.

(2) A Plea For Fewer Drugs and More Sunlight and Fresh Air.
By Dr. E. L. Crowson.

(3) Ulcerative Keratitis. By Dr. H. C. Goodson.

These papers were freely discussed by the members present.

Dr. C. E. Frank, who recently located in Maryville, was elected to membership in the Society.

On the whole this was one of the best meetings that has been held since the Society has been organized.

At our next meeting, which will be held November 12th, we expect to take up for consideration, with a view to adoption, the permanent program for county medical societies, as printed in a recent edition of the Journal of the American Medical Association.—H. L. SAYLER, M. D., Secretary.

PLATTE COUNTY MEDICAL SOCIETY.

The Platte County Medical Society held its annual picnic meeting at Bean Lake, Wednesday, September 4. The following physicians and families were present:—Dr. Chastain of Weston, Dr. C. E. Benham, wife and children, Dr. G. D. Yokom and wife of Parkville, Dr. Spence Redman and children, Dr. G. C. Coffey and wife of Platte City.

The day was spent in regular picnic fashion and greatly enjoyed by all.

MEETING OF OCTOBER 2.

The Society met in Platte City with the following members present: Drs. Herndon and Hull of Camden Point, Drs. Redman, Clark, Naylor and Coffey of Platte City.

Anesthetics, local and general was the subject for discussion. Dr. Clark in opening the discussion said that he preferred ether to chloroform on account of the bad effect chloroform had on the heart, which bad effect he believed occurred in the first few minutes of the beginning of anesthesia.

The subject was very freely discussed by all present and many points of interest and instruction were brought out.—G. C. COFFEY, M. D., Reporter.

RAY COUNTY MEDICAL SOCIETY.

The Ray County Medical Society held a very interesting and profitable meeting in Richmond, Wednesday, September 17.

The following members were present: E. H. Musson, Norborne; J. E. Ball, Millville; T. B. Cook, Rayville; C. B. Shatwell, R. L. Hamilton, J. W. Smith, Robt. Sevier and L. D. Greene, Richmond; and Dr. H. S. Major, Hardin.

Dr. Cook read an excellent paper on "Typhoid Fever" which was ably and thoroughly discussed by all present.

A good program has been prepared for the next meeting which will be held in Richmond on Wednesday, November 20.—H. S. MAJOR, M. D., Secretary.

SCOTT COUNTY MEDICAL SOCIETY.

The Scott County Medical Society met at Chaffee on October 9. Members present were: Drs. T. F. Frazer, T. R. Frazer, W. H. Wescoat, P. M. Malcolm, H. R. Lucas, W. S. Hutton, H. T. Blackledge, R. S. McCabe.

The Fee Bill was taken up, the discussion of which consumed the whole afternoon. A Fee Bill was compiled and recorded to await the approval of Society at the next meeting. The thanks of the Society were voted to Drs. McCabe and Lucas for the dinner at the hotel.

Society adjourned to meet at Edna (P. O. Fornfelt, Mo.) on the first Monday in January, 1908.—W. S. HUTTON, M. D., Secretary.

ST. JOSEPH-BUCHANAN COUNTY MEDICAL SOCIETY.

An open session was held on October 9th and resulted in arousing much interest in questions of public health and sanitation. Dr. P. I. Leonard said that the people should demand city meat inspection and the appointment of an official meat inspector.

Dr. O. G. Gleaves and Dr. F. S. Carpenter, among other members of the Society, made short talks supporting the movement to induce the city to appoint a meat inspector.

Dr. J. M. Bell read a paper entitled "Food Adulteration." In summarizing his remarks he said: "Adulteration of food stuffs should be abolished, first because it cheats the purchaser; second, because it impairs health, and third, because it jeopardizes life. The remedy for this is government and municipal inspection and public education by popular lectures and pamphlets."

City Chemist Quinliven said that milk of a standard quality should contain 3.25 per cent. butterfat, 8.75 per cent. of non-fatty solids, making a total of 12 per cent. fatty solids, and 88 per cent. water. Its specific gravity must be not more than 10.29. The real milk problem which we have to consider is not chiefly how a sufficient quantity of milk with the required percentage of fats and solids may be obtained, but how the inhabitants of the city shall be provided with milk which is sweet, clean and free from preservatives and other questionable substances and low in bacteria. The best method of securing milk low in bacteria and practically keeping it so, is cleanliness of the dairy and surroundings while milking, such as a clean barn for the herd, a clean place for milking and a careful and clean, healthy person to do the milking, and sterilized utensils. There may be found a great difference, however, in the milk from the time the dairyman gives it to the milk dealer to when it reaches the consumer. The dairyman may furnish the best kind of milk to the dealer, but the dealer at his own risk may water the milk or use preservatives.

Dr. Leonard said: "The agitation against the adulteration of food and drugs has a good prospect for the attainment of satisfactory

results. We have discovered that adulteration is far more widespread than even the alarmists have led us to believe. We have learned that perhaps we are more often robbed than harmed by adulterated products. But upon a goodly portion of our products could be painted the emblem of the cross bones and the skull—poison. These questions deserve the study of every medical man and every layman in the nation. The children must be rescued from the dangers of unhealthy milk. The children of today make the army of tomorrow's producers. Give them healthy food."

Dr. H. H. George, chief of the bureau of animal industry, read a paper entitled "Limitation of Federal Control in Meat Inspection." He said: "Operation under the meat inspection law of June 30, 1906, the United States department of agriculture, through the bureau of animal industry, undertakes to make an ante-mortem and post-mortem inspection of all animals and their carcasses which are slaughtered or are to be slaughtered in establishments whose products are expected to enter into interstate or foreign trade. In addition it assumes to supervise all processes in the preparation and handling of meat-food products in these establishments until they are ready for shipment. The meat inspection law provides for the making and enforcement of such rules and regulations as may be found necessary to enable the effectual conduct of the inspection and supervision. Important among the regulations which have been made are those which provide for the control and ultimate destruction as edible product of carcasses and parts which upon inspection have been found to be diseased, unsound, unwholesome or otherwise unfit for human food. There is also provision against the use of preservatives and coloring matters, except under specific conditions; against the use of adulterants and the mixture of meats from different species of animals, unless the label so states, and requiring the conduct of all operations under sanitary conditions. It then of necessity follows that there can be no federal control undertaken which has for its purpose the elimination of diseased animals or carcasses intended for human consumption, or of diseased or unsound meats found in the markets, so long as those products are offered for sale only within the state in which they are prepared. The situation becomes of local interest when it is remembered that, in the absence of state or municipal control, the meat consuming public is measurably at the mercy of those who, unmindful of the welfare of others, are willing to place upon the market meats known to be unfit for food. As long as public stockyards and private slaughtering places exist without state or municipal control, opportunity will exist for the purchase and slaughter of animals unfit for slaughter. As long as the moral standard is subordinated to the money standard, those opportunities will be improved and men will be found who, by the aid of condiments, deodorants and preservatives, will offer for sale meats in which putrefactive process has been obscured, or which bear the germs of loathsome disease."

THIRD DISTRICT MEDICAL SOCIETY.

(COUNTIES OF HARRISON, WORTH, GENTRY, DEKALB.)

The annual meeting of the Third District Medical Society will be held at Maysville on November 12th and 13th. All members in this district are earnestly requested to be present.

The excellent scientific program will prove exceedingly interesting and highly profitable. The following papers have been promised:

Placenta Previa	Dr. O. P. M. Mills
Diseases of Joints, Tubercular and Non-Tubercular.....	Dr. Geiger
Capillary Bronchitis	Dr. J. W. Conard
Autointoxication	Dr. J. N. Barger
Differential Diagnosis of Hysteria and Neurasthenia.	Dr. W. F. Kuhn
Cystitis	Dr. Phipps
Gastrointestinal Inflammations	Dr. J. M. Bell
Treatment of the More Common Diseases of the Eye.....	Dr. Kenny
Fractures	Dr. C. H. Wallace
Osteo-Myelitis.....	Dr. O. B. Campbell
Pulmonary Hemorrhage.....	Dr. B. S. Stuart
Mitral Insufficiency.....	Dr. A. B. McGlothlin
Acute Croupous Pneumonia.....	Dr. Landis
Nervousness: Its Significance and Treatment.....	Dr. Jno. Punton

BOOK REVIEWS

A TREATISE ON FRACTURES AND DISLOCATIONS. By Lewis A. Stimson, B. A., M. D., Professor Surgery in Cornell University Medical College, New York. New (5th) edition, thoroughly revised. Octavo, 847 pages, with 352 engravings and 52 plates. Cloth, \$5.00, net; leather, \$6.00, net; half morocco, \$6.50, net. Lea Brothers & Co., Philadelphia and New York, 1907.

In this volume, which now has become classical, the author covers every known form of these lesions, many of which actually have been for the first time described in this work. This single volume affords complete and authoritative information in a large and important field of surgery with which every practitioner of necessity must be conversant.

PARAFFIN IN SURGERY. A critical and clinical study by Wm. H. Lockett, M. D. Attending Surgeon, Harlem Hospital, Surgeon to the Mt. Sinai Hospital Dispensary of New York and Frank I. Horne, M. D. Formerly Assistant Surgeon, Mt. Sinai Hospital Dispensary. 12 mo.; 38 Illustrations; 118 Pages. Surgery Publishing Co., 92 William Street, N. Y. City. Cloth \$2.00:

This book covers a special field in surgery of interest both to the surgeon and general practitioner. Full details are given as to the method of Preparing the Paraffin as well as the method and manner in which it should be injected. The book presents a wide field for the use of Paraffin. It is printed upon heavy coated book paper and attractively bound in the best quality of heavy red cloth, stamped in gold.

GOLDEN RULES OF SURGERY. Aphorisms, Observations and Reflections on the Science and Art of Surgery. Being a Guide for Surgeons and those who would become Surgeons. By Augustus Charles Bernays, A. M., M. D. (Hdlbg.), M. R. C. S. (Eng); Life Member of the German Society for Surgery of Berlin; Chief Surgeon, Lutheran Hospital. St. Louis: The C. V. Mosby Medical Book Co. 1906.

This is an interesting little book which considers the following subjects in chapters: The Education of a Surgeon; On Scientific Contributions to the Literature of Medicine and Surgery; Science and Surgery; On Ways and Means of Building up a Practice; About Fees; Off With the Cloak of Superstition; Some Golden Rules of Surgery; Away with Inflammation and the Confusion it has Caused; Reminiscences.

NON-SURGICAL DISEASES OF THE PROSTATE AND ADNEXA. By Geo. Whitfield Overall, A. B., M. D. Rowe Publishing Co. Chicago.

This work treats of a subject that has been much abused in surgical practice.

The use of electricity in the ways mentioned will be new to the majority of practitioners and the new instruments will be a welcome addition to the present armamentarium.

The author has not lucidly given his ideas of drugs to be used and the exact manner of using them though otherwise he has given us a painstaking treatise on this subject. The work is well illustrated.

E. E. H.

PRACTICAL TREATISE ON MATERIA MEDICA AND THERAPEUTICS, with Especial Reference to the Clinical Application of Drugs. By John V. Shoemaker, M. D., LL. D., Professor of Materia Medica, Pharmacology, Therapeutics, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia. Sixth Edition. Thoroughly Revised. (In Conformity with Latest Revised U. S. Pharmacopœia, 1905.) Royal Octavo, 1244 Pages. Extra Cloth. Price, \$5.00 net. Full Sheep. Price, \$6.00 net. F. A. Davis Company, Publishers, 1914 Cherry St., Philadelphia, Pa.

This revised edition of Shoemaker's work requires no special recommendation. The previous editions have been perfected, thus making the present one a standard text-book of this country on materia medica and therapeutics.

A TEXT-BOOK ON THE PRACTICE OF GYNECOLOGY. For Practitioners and Students. By W. Easterly Ashton, M. D., LL. D., Professor of Gynecology in the Medico-Chirurgical College of Philadelphia. *Third Edition, Thoroughly Revised.* Octavo of 1096 pages, with 1057 original line drawings. Philadelphia and London: W. B. Saunders Company, 1906. Cloth, \$6.50 net; Half Morocco, \$7.50 net.

In looking over this work we are impressed with the thoroughness of the author's description of each subject, and with his concise and condensed manner of expression. He gives special consideration to microscopic examination of the discharges from the genital tract.

He takes up the subject of Leukocytosis, also devotes one chapter to Saline Injections, Intravenous and Hypodermoclysis, which is of great importance to the practitioner of today.

The chapters devoted to the Inflammation of the Uterus and Ectopic Gestation especially impress us as being extremely interesting.

This work is one of the most up-to-date treatises on gynecology that we have ever had the pleasure of looking over.

T. J. BEATTIE.

PULMONARY TUBERCULOSIS FOR PRACTITIONERS. By Albert Francine, Instructor in Medicine to the University of Pennsylvania, examining physician White Haven Sanitarium, Member of Staff of the Henry Phipps Institute. J. B. Lippincott Co., Philadelphia.

This book is without doubt the most concise work on this subject. The chapter on diet is of especial value. The author emphasizes the fact that if a teaspoonful of food disturbs the patient, that teaspoonful is more than is necessary at that time. His advice to avoid the use of opium altogether and morphine only to quiet patients during or after a frank hemorrhage, if followed, will save trouble.

The chapter on prophylaxis is full of points which our Sanitary Commissions as well as physicians could follow and save time as they can be applied to any district with success.

R. W. HOLBROOK.

NOTES.

ST. NICHOLAS IN 1908.

St. Nicholas will have a unique serial feature, beginning in its November number, in the actual log, or daily record, of a "Bluejacket" on the cruiser Olympia of the United State Navy. "Three Years Behind the Guns," as this unusual true story is to be called, sets down, in a homesick lad's own words, the daily life and adventures of a clever boy who ran away to sea and enlisted on the Olympia in 1898, little dreaming that before his three years' enlistment was ended he would be on the commodore's ship in the Battle of Manila Bay.

The Craftsman, founded in 1901, and edited by Gustav Stickley, has taken foremost position as a magazine devoted solely to the encouragement of handicrafts in America. Its editor being the leading spirit in this direction, *The Craftsman* has had phenomenal success. The October number is the first of its seventh year, and the announcements made indicate that there are still greater things in store for the coming year for this splendid magazine. Space will not permit us to give details, but, if interested, just send for a sample copy. Address *The Craftsman*, 29 West 34th St., New York City.

The fiction serial of *The Century* in 1908 will be a new historical novel by Dr. S. Weir Mitchell, to be entitled "The Red City." This new novel by Dr. Mitchell is a companion to his famous "Hugh Wynne." While the former was a story of the time of Washington the General, the new one is of the time of Washington the President.

AMERICAN MEDICAL ASSOCIATION.

Next Annual Meeting at Chicago, 1908.

President: JOSEPH D. BRYANT, New York City.

President Elect: HERBERT L. BURRELL, Boston.

Secretary and Editor: GEORGE H. SIMMONS, 103 Dearborn Ave., Chicago.

MISSOURI STATE MEDICAL ASSOCIATION.

Next Annual Meeting, Springfield, May 1908.

President: W. S. ALLEE, Olean.

Vice Presidents:

THOS. B. COOKE, Rayville; A. H. VANDIVERT, Bethany; CHAS. HOUGH, Jefferson City;

J. P. DUNIGAN, Holliday; O. F. PILE, Memphis.

Secretary: A. W. McALESTER, Jr., Kansas City.

Assistant Secretaries: PAUL Y. TUPPER, St. Louis; GAIL ALLEE, Lamar.

Treasurer: J. FRANKLIN WELCH, Salisbury.

Medical Section.

Chairman: T. F. LOCKWOOD, Butler.

Secretary: GAIL ALLEE, Lamar.

Surgical Section.

Chairman: H. E. PEARSE, Kansas City.

Secretary: P. Y. TUPPER, St. Louis.

ORATORS.

Oration on Medicine:

JOHN H. DUNCAN, St. Louis.

Oration on Surgery:

HERMAN E. PEARSE, Kansas City.

COMMITTEES:

Committee on Scientific Work.

H. E. Pearse, T. F. Lockwood, P. Y. Tupper, Gail Allee.

Publication Committee.

W. B. Dorsett, Chairman. M. B. Clopton, M. C. Shelton.

Committee on Public Policy and Legislation.

C. E. Fulton, Chairman; H. E. Pearse, Geo. W. Wilson.

Committee on Medical Education.

N. B. Carson, Chairman; C. M. Jackson, E. W. Schaffler.

Committee on Tuberculosis.

Wm. Porter, Chairman; W. M. Bayliss, J. B. Norman, M. P. Overholser, Tinsley Brown.

COUNCILLOR DISTRICTS AND COUNTIES IN EACH DISTRICT.*

F. J. LUTZ, Chairman.

E. J. GOODWIN, Secretary.

First District.—Councillor, C. L. Evans, Oregon. Counties: Holt, Atchison, Nodaway.

Second District.—Councillor, W. T. Elam, St. Joseph. Counties: Buchanan, Andrew.

Third District.—Councillor, G. W. Whitely, Albany. Counties: Harrison, Worth, Gentry, DeKalb.

Fourth District.—Councillor, C. R. Buren, Princeton. Counties: Grundy, Sullivan, Mercer, Putnam.

Fifth District.—Councillor, E. E. Parrish, Memphis. Counties: Clark, Scotland, Schuyler.

Sixth District.—Councillor, H. Jurgens, Edina. Counties: Adair, Knox, Lewis.

Seventh District.—Councillor, L. W. Dallas, Hunnewell. Counties: Shelby, Marion, Ralls.

Eighth District.—Councillor, W. B. Dorsett, St. Louis. Counties: Lincoln, St. Charles, St. Louis, Pike.

Ninth District.—Councillor, Woodson Moss, Columbia. Counties: Audrain, Boone, Howard, Callaway, Warren, Montgomery.

Tenth District.—Councillor, C. W. Reagan, Macon. Counties: Macon, Randolph, Monroe.

Eleventh District.—Councillor, J. D. Brummall, Salisbury. Counties: Chariton, Carroll, Livingston, Linn.

Twelfth District.—Councillor, E. H. Miller, Liberty. Counties: Platte, Clay, Ray, Clinton, Caldwell, Daviess.

Thirteenth District.—Councillor, N. P. Wood, Independence. County: Jackson.

Fourteenth District.—Councillor, C. T. Ryland, Lexington. Counties: Lafayette, Saline, Cooper.

Fifteenth District.—Councillor, M. P. Overholser, Harrisonville. Counties: Cass, Johnson.

Sixteenth District.—Councillor, J. R. Buchanan, Nevada. Counties: Bates, Vernon, Barton.

Seventeenth District.—Councillor, R. D. Haire, Clinton. Counties: Pettis, Henry, Benton, St. Clair, Hickory.

Eighteenth District.—Councillor, Frank DeVilbiss, Eugene. Counties: Miller, Moniteau, Morgan, Camden.

Nineteenth District.—Councillor, G. Ettmueller, Jefferson City. Counties: Cole, Osage, Maries, Gasconade.

Twentieth District.—Councillor, F. J. Lutz, St. Louis. Counties: Franklin, St. Louis City.

Twenty-first District.—Councillor, B. M. Hypes, St. Louis. Counties: Jefferson, Ste. Genevieve, Perry.

Twenty-second District.—Councillor, J. D. Porterfield, Jr., Cape Girardeau. Counties: Scott, Madison, Cape Girardeau, Mississippi, Bollinger.

Twenty-third District.—Councillor, D. R. Corbin, Bloomfield. Counties: Stoddard, Dunklin, Pemiscot, New Madrid.

Twenty-fourth District.—Councillor, J. J. Norwine, Poplar Bluff. Counties: Wayne, Butler, Ripley, Carter.

Twenty-fifth District.—Councillor, F. L. Keith, Flat River. Counties: Washington, Reynolds, Iron, St. Francois.

Twenty-sixth District.—Councillor, R. L. Johnson, Rolla. Counties: Crawford, Phelps, Pularski, Laclede, Dent, Dallas.

Twenty-seventh District.—Councillor, H. C. Shuttee, West Plains. Counties: Howell, Shannon, Ozark, Oregon, Texas, Wright, Douglas.

Twenty-eighth District.—Councillor, T. A. Coffelt, Springfield. Counties: Greene, Lawrence, Barry, Stone, Christian, Webster, Polk, Taney.

Twenty-ninth District.—Councillor, A. R. Snyder, Joplin. Counties: McDonald, Newton, Jasper, Cedar, Dade.

*Counties in italics are not organized.

County Societies in Affiliation with the State Medical Association

County.	President	Address of President.	Secretary	Address of Secy.
Adair	E. C. Callison	Kirkville.	C. C. Grim	Kirkville.
Andrew	E. C. Bennett	Bolckow	C. O. Jeffries	Savannah
Atchison	E. A. Lewis	Rockport.	A. McMichael	Rockport.
Audrain	C. A. Rothwell	Mexico.	E. S. Cave	Mexico.
Barry	Wm. M. West	Monett.	D. L. Mitchell	Cassville
Barton	J. Warren	Lamar.	G. D. Allee	Lamar.
Bates	G. C. Compton	Pleasant Gap.	E. N. Chastain	Rich Hill.
Benton	E. L. Rhodes	Lincoln.	W. G. Jones	Lincoln.
Boone	E. L. Thornton	Columbia.	W. A. Norris	Columbia.
Buchanan	O. G. Gleaves	St. Joseph.	Chas. W. Fassett	St. Joseph.
Butler	C. F. Green	Poplar Bluff.	A. R. Rowe	Poplar Bluff.
Caldwell	W. T. Lindley	Hamilton.	Tinsley Brown	Hamilton.
Callaway	G. F. Roots	Tebbetts.	I. F. Harrison	Fulton.
Camden	G. M. Moore	Linn Creek.	G. T. Myers	Macks Creek.
Cape Girardeau	G. W. Vinyard	Jackson.	E. H. G. Wilson	Cape Girardeau.
Carroll	W. C. Baird	Bogard.	R. F. Cook	Carrollton.
Carter-Shannon	Wm. Fulton	Winona.	J. A. Chilton	Van Buren.
Cass	H. A. Briery	Peculiar.	W. F. Chaffin	Raymore.
Cedar	Kimball Hill	El Dorado Springs.	J. W. Dawson	El Dorado Springs.
Chariton	Oliver McEwen	Shannondale.	C. A. Jennings	Salisbury.
Christian	J. C. Young	Osark.	J. A. Johnson	Osark.
Clark	J. W. Bridges	Kahoka.	F. B. Hiller	Kahoka.
Clay	L. I. Jones	Linden.	P. H. Matthews	Liberty.
Clinton	John Sturgis	Perrin.	E. A. Colley	Plattsburg.
Cole	C. P. Hough	Jefferson City.	S. V. Bedford	Jefferson City.
Cooper	F. R. Smiley	Boonville.	J. R. Lionberger	Boonville.
Crawford	W. A. Metcalf	Steelville.	A. H. Horn	Steelville.
Daviess	W. L. Brosius	Gallatin.	M. A. Smith	Gallatin.
DeKalb	H. P. Yeater	Maysville.	R. A. Evans	Amity.
Dent	A. F. McMurtrey	Salem.	J. C. Welch	Salem.
Dunklin	N. F. Kelley	Kennett.	G. L. Johnson	Kennett.
Franklin	H. A. Booth	Pacific.	A. C. Brown	Moselle.
Gasconade-Marie				
Osage	J. J. Ferrell	Owensville.	J. W. Nieweg	Lois.
Gentry	G. W. Whiteley	Albany	J. N. Conrad	Albany.
Greene	J. R. Boyd	Springfield.	J. L. Ormsbee	Springfield.
Grundy	E. E. Sutton	Trenton.	D. W. Coon	Trenton.
Harrison	C. A. Mitchell	Blytheedale.	F. A. Broyles	Bethany.
Henry	B. B. Barr	Clinton.	F. M. Douglass	Clinton.
Holt	C. L. Evans	Oregon.	J. F. Chandler	Forest City.
Howard	N. E. Smith	Fayette.	C. W. Watts	Fayette.
Howell	H. C. Shuttee	West Plains.	A. H. Thornburgh	West Plains.
Iron	R. W. Gay	Ironton.	Ira A. Marshall	Ironton.
Jackson	O. H. Dove	Kansas City.	E. L. Stewart	Kansas City.
Jasper	M. C. Shelton	Joplin.	R. M. James	Joplin.
Jefferson	J. W. Pickel	Crystal City.	R. E. Donnell	DeSoto.
Johnson	L. J. Schofield	Warrensburg.	E. H. Gilbert	Warrensburg.
Knox	L. S. Brown	Edina.	Henry J. Jurgen	Edina.
Laclede	J. A. McComb	Lebanon.	J. A. Pinckard	Lebanon.
Lafayette	P. S. Fulkerson	Lexington.	C. T. Ryland	Lexington.
Lawrence-Stone	F. S. Stevenson	Aurora.	C. A. Moore	Aurora.
Lewis	J. C. Brown	Lewistown.	Paul F. Cole	Steffenville.
Lincoln	S. R. McKay	Troy.	Wm. P. Smith	Troy.
Linn	J. W. Mason	Brookfield.	Foster Burke	Laclede.
Livingston	L. E. Tracy	Chillicothe.	W. M. Girdner	Chillicothe.
McDonald	E. F. Doty	Anderson.	M. L. Sellers	Anderson.
Macon	W. H. Miller	Macon.	C. W. Reagan	Macon.
Madison	C. A. Anthony	Fredericktown.	S. C. Slaughter	Fredericktown.
Marion	Richard Schmidt	Hannibal.	H. L. Banks	Hannibal.
Mercer	H. P. Chesmore	Princeton.	C. R. Buren	Princeton.
Miller	W. A. Von Grempe	Iberia.	W. L. Allee	Eldon.
Mississippi	H. L. Reid	Charleston.	R. K. Ogilvie	Charleston.
Moniteau	S. H. Redmon	Tipton.	R. R. Patterson	Tipton.
Monroe	M. M. Brown	Monroe City.	M. C. McMurry	Paris.
Morgan	P. G. Woods	Paris.	H. N. Lutman	Paris.
New Madrid	Wm. O'Bannon	New Madrid.	C. W. Watson	New Madrid.
Newton	R. L. Will	Neosho.	Horace Bowers	Neosho.
Nodaway	F. R. Anthony	Maryville.	H. L. Saylor	Elmo.
Pemiscot	J. G. Luten	Caruthersville.	John Johnson	Hayti.
Perry	T. M. Hudson	Perryville.	F. M. Vessells	Perryville.
Pettis	S. G. Kelly	Sedalia.	Guy Titsworth	Sedalia.
Phelps	W. H. Bruer	St. James.	S. L. Baysinger	Rolla.
Pike	J. W. Dreyfus	Louisiana.	R. G. Hereford	Louisiana.
Platte	Spence Redman	Platte City.	G. C. Coffey	Platte City.
Polk	J. E. Loafman	Bolivar.	A. P. Mitchell	Bolivar.
Pulaski	W. L. Ragan	Richland.	G. W. Orrick	Crocker.
Putnam	C. H. Carryer	Hartford.	T. A. Townsend	Unionville.
Rails	Fred Walter	Perry.	T. J. Downing	New London.
Randolph	G. O. Cuppage	Merberly.	W. M. Dickerson	Knicks.
Ray	E. H. Musson	Norborne.	H. S. Major	Hardin.
Reynolds	J. M. Lowrey	Centerville.	T. W. Chilton	Corrison.
Ripley	S. A. Proctor	Doniphan.	J. F. Redwine	Doniphan.
Saline	D. C. Gore	Marshall.	D. F. Bell	Marshall.
St. Charles	J. R. Mudd	St. Charles.	B. K. Stumberg	St. Charles.
St. Clair	W. Cline	Appleton City.	D. B. Williams	Osceola.
St. Francois	J. L. Haw	Farmington.	A. L. Evans	Bonne Terre.
Ste. Genevieve	C. Moore	St. Marys.	R. W. Lanning	St. Genevieve.
St. Louis	J. C. Morfit	Humboldt Bldg.	Davis Forster	\$249 Raymond.
St. Louis Co.	R. E. Guibor	Maplewood.	R. D. Moore	Central.
Schuyler	I. T. Jones	Queen City.	H. E. Gerwig	Downing.
Scotland	T. E. H. Bondurant	Memphis.	A. E. Platter	Memphis.
Scott	T. F. Frazier	Commerce.	W. S. Hutton	Fornick.
Shannon	Frank Hyde	Emmence.	J. A. Chilton	Van Buren.
Shelby	J. D. Smith	Shelbina.	A. M. Wood	Lentner.
Stoddard	T. B. Wingo	Dexter.	John Ashley	Bloomfield.
Sullivan	J. C. Kessinger	Milan.	S. S. Montgomery	Milan.
Vernon	W. T. Bohannon	Nevada.	T. McLemore	Nevada.
Warren	W. J. Alexander	Marthasville.	E. A. Fluessmeier	Wright City.
Washington	J. A. Eaton	Belgrade.	W. S. Smith	Belgrade.
Wayne	J. P. Sebastain	Patterson.	R. J. Owens	Mill Spring.
Webster	H. Highfill	Marshfield.	Wm. R. Beatie	Marshfield.
Worth	Arch Long	Denver.	J. K. Phipps	Grant City.